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## The Role of Occupational Therapy with the Foster Care System: Implementation of Routine Screening Procedures

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The Role of Occupational Therapy with the Foster Care System: Implementation of  
Routine Screening Procedures

by

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A Scholarly Project

Submitted to the Occupational Therapy Department of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

Master of Occupational Therapy

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This scholarly project, submitted by Hannah Merges, MOTS and Sydney Gayton, MOTS in partial fulfillment of the requirement for the Degree of Master of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

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Faculty Advisor

*04-04-2020*

Date

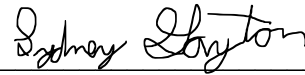
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Degree: Master of Occupational Therapy

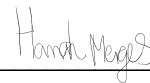
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## ABSTRACT

**Title:** The Role of Occupational Therapy with the Foster Care System: Implementation of Routine Screening Procedures.

**Purpose:** Children in foster care are considered an at-risk population for developmental delays, due to their life experiences (Fraser et al., 2017; Jacobsen et al., 2013; Mueller et al., 2010; Oral et al., 2016; Ryan et al., 2017; Wade et al., 2017). The purpose of this scholarly project was to identify the needs of these children specifically in the regions of the University of North Dakota's Occupational Therapy Program's campuses, located in Grand Forks, North Dakota and Casper, Wyoming. Currently, there is an increase of children entering the foster care systems in ND and WY (Casey Family Programs, 2019; North Dakota Department of Human Services, 2016). A literature review concluded there are no routine procedures in place to screen these children for developmental delays (Hodges et al., 2016). Therefore, needs of foster care children are going undetected. Occupational therapists are trained professionals which can help detect these children's needs (American Occupational Therapy Association, 2019b). Additionally, occupational therapy students have been deemed an appropriate group to implement screening procedures (American Occupational Therapy Association, 2019b). By screening children in foster care, students would be engaging in active and service learning experiences, which are proven to benefit the student as an emerging professional (Hodges et al., 2016). Thus, the authors of this scholarly project created an elective educational course for the University of North Dakota's Occupational Therapy Doctoral Program's students to screen children in foster care. It is titled *OT 599: Special Topics Occupational Therapy*

*Screening Process.* To propose this course to foster care agencies, an evidenced-based presentation was created via PowerPoint.

**Methodology:** An extensive literature review was conducted through databases provided by UND including PubMed, CINAHL, and ERIC. Additional credible resources utilized were the American Occupational Therapy Association, American Journal of Occupational Therapy, North Dakota's Department of Human Services, and Casey Family Programs. The model that guided the development of this scholarly project was the Ecology of Human Performance (Dunn, Brown & McGuigan, 1994). The literature review included topics such as the impacts of trauma on childhood development, the role of occupational therapy with the foster care system, occupational therapy and foster care screening procedures, and student learning in higher education.

**Results:** There were two products created: an elective course for UND OTD students to screen children in foster care and a presentation via PowerPoint to propose this course to foster care agencies in the Grand Forks, ND and Casper, WY regions. These products were created to fulfill the developmental needs of children in foster care while concurrently providing OT students an active and service learning opportunity to support their educational experience towards becoming an OT practitioner.

**Conclusion:** This scholarly project will be presented to the UND Occupational Therapy Department and foster care agencies in the regions of the UND OT campuses with hopes of being implemented into the curriculum. The proposed active and service learning experience will provide students with an in-depth understanding of the OT screening process, while offering services to the at-risk population of children in foster care.



## **Chapter I: Introduction**

A significant amount of research has indicated higher risk of developmental delays for children in the foster care system compared to their peers, due to the level of trauma experienced (Fraser et al., 2017; Jacobsen et al., 2013; Mueller et al., 2010; Oral et al., 2016; Ryan et al., 2017; Wade et al., 2017). Trauma has been shown to alter brain structures of victims and may impact sensory, gross and fine motor, cognitive, social-emotional, and behavioral development of children (Fraser et al., 2017; Jacobsen et al., 2013; Mueller et al., 2010; Oral et al., 2016; Ryan et al., 2017; Wade et al., 2017). According to the American Academy of Pediatrics (AAP), children in foster care should be routinely screened to detect developmental delays within 30 days of entering the foster care system (Hodges, Landin, Melodee, & Simpson, 2016). However, children may not be receiving these screenings due to revolving contextual influences such as changes in medical providers, differing care providers, and limited community resources (Hodges et al., 2016). Thus, delays in development go undetected at a higher rate for children in the foster care system compared to their peers, which leads to not receiving necessary services (Hodges et al., 2016). According to Hodges et al. (2016), children in the foster care system who are routinely screened for developmental delays have earlier detection rates of delays and are receiving services quicker when compared to children who are not routinely screened. Detecting developmental delays at a young age increases appropriate childhood development and overall quality of life for the child (Hodges et al., 2016). Concluding there is a need to implement a consistent screening process for all foster care agencies to administer.

Occupational therapists are trained to evaluate and screen individuals across the life span (Associates in Pediatric Occupational Therapy, 2019), and are equipped to address the needs of

children who have developmental delays. Occupational therapists are provided this training while they are students in an OT program. Once an OT student is competent in understanding the screening process they can complete screenings on individuals in the community under the supervision of a licensed occupational therapist.

As identified, one reason children in the foster care system are not being screened for developmental delays is due to limited community resources. Occupational therapy students can help address the unmet need by providing this service to the community. Consequently, a unique opportunity for the University of North Dakota's Occupational Therapy (UND OT) Program to serve communities through active and service learning experiences has emerged. Active and service learning experiences are beneficial to student learning, specifically student retention of curriculum information (Hooper, 2006; National Service-Learning Clearinghouse, 2011). Therefore, the authors of this scholarly project propose a developed course for UND OTD students to screen children in the foster care system. Creating a win-win situation for the children in foster care and the students in the OT program. During this process, it will be discovered which children qualify for further evaluation of services while OT students are simultaneously learning how to conduct the screening process in a community-based setting.

## **Product**

To address the need for screening children in foster care and to benefit OT student learning, the authors developed a product composed of two sections. Section one includes a comprehensive, educational presentation created via PowerPoint. It will be presented to the Grand Forks, ND and Casper, WY foster care agencies. This presentation outlines the need to routinely screen children in the foster care system. It includes in-depth information on how children in the foster care system are at a high risk for developmental delays and how the delays are not being detected due to contextual influences. Lastly, the PowerPoint presentation includes a proposal to meet this unmet need by UND OT students implementing routine screenings for children in the foster care system through an elective educational course. Parameters of the course will be described to the foster care agencies.

Section two is a proposed elective educational course for UND's OTD program. The purpose of the course is for OT students to further learn about the foster care system and implement screening tools designed to detect developmental delays. This class will help prepare students, supervised by a licensed OT, to screen children in the foster care system. The specific screening tools utilized in the course are the Occupational Therapy Referral Screening Tool (OTRT) and Sensory Profile-2. The OTRT was selected as it is designed to specifically analyze childhood development for children who have endured trauma (Fox & Kollodge, 2019). The Sensory Profile-2 is a supplemental screening tool to the OTRT as it emphasizes the child's sensory system, which can also be impacted by childhood trauma (Fraser, Mackenzie, & Versnel, 2017; Ryan, Lane, & Powers, 2017). Upon implementing these two screening tools, the students will make appropriate referral and recommendation options for children in the foster care system. Overall, this course allows students to gain experience with the OT screening

process while providing critical services to children in the foster care system. Influencing factors of the application of this product will include buy-in from the UND OTD faculty, UND OTD students, and the directors of the foster care systems. As stated previously, the students will need to have a licensed OT supervisor to teach course material and oversee the onsite screening process delivered by students.

The model of Ecology and Human Performance (EHP) was utilized as the contextual framework for the designed elective course, *OT 599 Special Topics: Occupational Therapy Screening Process*. Ecology of Human Performance was chosen as it guides professionals with an emphasis of the importance of one's context and how context influences task performance (Dunn, Brown & McGuigan, 1994). Analyzing context is critical for children in the foster care system as they are being taken out of their current contexts and placed into a novel context upon entering the system. Additionally, EHP outlines how to analyze one's personal variables including their sensorimotor, cognitive, and psychosocial variables, all of which can be impacted by trauma (Dunn et al., 1994). Additionally, EHP was used to guide the development of this scholarly project due to its emphasis on health-promotion, community-based services, and preventive care. The implementation of this product is a form of health-promotion and preventative care for children in the foster care system as they are receiving services that will allow for earlier detection of developmental delays. Lastly, this model is optimal to utilize while working in this setting because it uses common, everyday language promoting interdisciplinary communication among all parties involved.

### **Project Overview**

This scholarly project is comprised of five chapters. Chapter I contains an introduction to the topic, an overview of the current problem, and a justification for an opportunity to solve the

problem. Chapter II provides a review of current literature to support the product. This chapter contains detailed information about why children in foster care are not being consistently screened for developmental delays and a solution to combat this unmet need. Additionally, it has an outlined plan to engage UND OTD students in an active and service learning experience. Chapter III, methodology, comprises the methods the authors used to help guide the development of this scholarly project. It provides a description of the direct research process, which includes how data was gathered and analyzed throughout the development of the product. Chapter IV is the product and consists of two sections. Section one is an evidence-based proposal via PowerPoint to foster care agencies outlining the need to routinely screen children in the foster care system for developmental delays. Section two is the outline of an elective educational course for UND's OTD program that meets the educational needs of the students and the developmental needs of children in foster care. This course is titled, *OT 599: Special Topics Occupational Therapy Screening Process*. The course syllabus is complete with learning objectives, a schedule, assignments, assignment rubrics, and weekly facilitation guides for the instructor of the course. The educational course will offer students an in-depth perspective on the OT screening process while working with children in the foster care system. Chapter V is the summary of the scholarly project. It includes the purpose of the project, limitations, how it could be implemented, and recommendations for future action.

### **Key Terms and Concepts**

While reviewing research for this project key terms and concepts were used to narrow the scope of information. Key terms and concepts are as follows: foster care, screening tools, developmental delays, trauma-informed care, health outcomes, occupational therapy,

occupational therapy education, active learning, and service learning. By identifying key terms and concepts to represent this project it allows authors to define the purpose of the product.

The first term the authors researched was foster care. Foster care is defined as a temporary placement setting for children whose guardians are neglectful, unable or refuse to meet their child's basic needs (North Dakota Department of Human Services, 2016). The next term was developmental delays. Hodges, Landin, Nugent and Simpson (2016) stated that developmental delays occur when a child does not reach their developmental milestones at the expected norms. The authors researched the definition of screening tools to understand what procedures have been used to identify children's developmental level. According to Shotwell (2014), screening tools are used as a preventative measure to help detect or reduce symptoms to improve health outcomes of the population. For this project, the screening tools are utilized to detect childhood developmental delays. This leads to the health outcomes of children in foster care. Upon completion of a literature review, detecting developmental delays at a young age increases appropriate childhood development and overall health outcomes for the child (Hodges et al., 2016). To include occupational therapy's role with screening for developmental delays, the scope of occupational therapy became a major concept to include in the scholarly project. The profession of OT consists of helping people across the lifespan participate in the events they want or need to do in order to participate in everyday activities or occupations (American Occupational Therapy Association [AOTA], 2019a). Due to the authors' additional interest in OT student learning, they determined concepts for valuable teaching strategies, which were active and service learning. Active learning is a learning style through direct engagement and participation in activities (Harris & Welch-Bacon, 2019). Service learning is a learning style through active involvement in a range of activities and experiences,

often benefiting the community (Currie-Muller & Littlefield, 2018; Maloney & Griffith, 2013; Meyers, 1999). These learning styles are utilized to advance the goals of educational curriculum (Currie-Muller & Littlefield, 2018; Harris & Welch-Bacon, 2019; Maloney & Griffith, 2013; Meyers, 1999). For this project, active and service learning were used while designing the course.



## **Chapter II: Review of Literature**

## **Overview of Foster Care System in the United States**

The foster care system is a temporary service for children whose parents/guardians are neglectful, unable, or refuse to meet their child's basic needs (Child Welfare Information Gateway, 2017; North Dakota Department of Human Services, 2016). When caregivers meet these criteria, the state provides 24-hour care for the child (North Dakota Department of Human Services, 2016; Voices for Children, 2018). The foster care system provides a safe and stable living placement until a child can return home, are permanently adopted by another family, or age out of the system (Child Welfare Information Gateway, 2017; Voices for Children, 2018). Placement settings for individuals in the foster care system include group homes, emergency shelters, residential care facilities, and supervised independent living centers (Child Welfare Information Gateway, 2017). If a permanent home is not found the child will age out of the foster care system between 18-21 years old, depending on the state (Voices for Children, 2018). According to the U.S. Children's Bureau, there were approximately 513,000 children in the foster care system in 2016. Approximately 36% of these children had been in the system for 17 months or longer (U.S. Children's Bureau, 2016).

Children are often placed into foster care services due to exposure to trauma (Oswald, Fegert, & Goldbeck, 2010). According to Stein et al. (2001) approximately 90% of children in foster care have experienced trauma. Examples of trauma include community and/or domestic violence, variations of abuse and/or neglect (physical, sexual, emotional, or psychological), having someone close to them pass away, unstable or unlivable housing conditions, or caregiver abandonment (Dorsey et al., 2011; Lynch et al., 2017; Stein et al., 2001). As depicted in the

literature described below, one can infer that trauma impacts the development of a child. Therefore, children who have been in the foster care system, even once, are at a higher risk for developmental, social-emotional, cognitive, behavioral, neurological, and sensory deficits.

### **North Dakota's Foster Care System**

According to the North Dakota Department of Human Services (2016) the number of children entering foster care in North Dakota has been increasing over the last five years. In 2016, there were over 1,000 new entries into the foster care system (North Dakota Department of Human Services, 2016). Half of these cases were due to parental substance use (North Dakota Department of Human Services, 2016). While there had been an increase in children entering the foster care system in North Dakota, there was also an increase in the number of licensed foster care homes (Mook, 2018). Currently there are 1,016 licensed foster care homes in the state which is considered to be an “all-time high” according to Mook (2018). As the number of children in foster care increases in North Dakota, the need to address the children’s medical care also increases.

### **Wyoming's Foster Care System**

According to Casey Family Programs (2019) 1,129 children entered into the Wyoming foster care system in 2017. Since 2011, there has been a steady increase in the number of children within the Wyoming foster care system (Casey Family Programs, 2019). Primarily, children were placed into foster care due to the following factors: caretakers inability to cope, parental death, parental substance abuse, parent incarceration, relinquishment or inadequate housing, child substance abuse, child disability, and/or child behavioral problems (Casey Family Programs, 2019). This data supports that children in the Wyoming foster care system have experienced traumatic events, which implies there is a necessity for intervention.

## **Developmental Impacts of Trauma**

Multiple studies have been conducted to understand the impact of childhood trauma. Researchers have found that trauma can alter the brain's structures and impact children's ability to reach developmental milestones. Domains frequently impacted are sensory, gross and fine motor, cognition, social-emotional, and behavioral. These domains are areas occupational therapists can directly address during therapeutic intervention (Haradon, 2011).

### **Occupational Therapy**

The profession of OT consists of helping people across the lifespan participate in the events they want or need to do in order to participate in everyday activities or occupations (American Occupational Therapy Association [AOTA], 2019a). While there is significant evidence on the role of occupational therapy (OT) working with the pediatric population, there is limited evidence on the role of occupational therapists interacting within the foster care system. However, many occupational therapists who work in pediatrics inadvertently work with children who have been placed into the foster care system, which gives pediatric occupational therapists an in-depth perspective of this population's needs (Haradon, 2001). Additionally, OT practitioners are becoming key contributors to working with children who experience early childhood adversity and/or are in the foster care system as this is an emerging field for the profession (Lynch et al., 2017).

Occupational therapists are uniquely trained to use meaningful activities to help children participate in occupations that promote physical health, mental health, and overall well-being (Lynch et al., 2017). According to the Occupational Therapy Practice Framework (2008), occupational therapists are trained to address the following occupations: activities of daily living (ADL's) (eating, dressing, hygiene, etc.), instrumental ADL's (meal preparation, shopping,

money management, etc.), education, sleep and rest, play, leisure, work, and social participation. OT places an emphasis on client-centeredness during therapy, allowing interventions to be uniquely tailored to the client's evolving needs and goals. Therefore, within the context of children in the foster care system, occupational therapists can be contributors who provide services that will optimize the child's development of motor, social, sensory, emotional, behavioral, and cognitive skills, which are areas that can be impacted by childhood trauma (Haradon, 2011; Paul-Ward, 2009). Lastly, occupational therapists can advocate with the foster care system to address the developmental needs of the children in efforts to take preventative action (Lynch et al., 2017; Paul-Ward, 2009).

### **Structural Aspects of the Brain**

Mueller et al. (2010) supported early-life stress/trauma impacts structural aspects of the brain. Researchers compared adolescents who have experienced early-life stress/trauma to adolescents who had not experienced early-life stress/trauma through fMRI imaging of their brains while they participated in change signal tasks (Mueller et al., 2010). The researchers determined the adolescents who had experienced early-life stress used abnormal structures of their brain to process the information during the change signal tasks, and had significantly slower reaction times (Mueller et al., 2010). This research supports that trauma can impact individuals at the neuronal level (Mueller et al., 2010).

Oral et al. (2016) researched children's physiological response to toxic stress, including abuse, neglect, and household dysfunction. Concluding when a child is exposed to prolonged toxic stress it can alter structures of their brain, such as the hippocampus, prefrontal cortex, and amygdala (Oral et al., 2016). When the hippocampus undergoes toxic stress, it negatively impacts the child's learning capacity and ability to retain memories (Oral et al., 2016). The

prefrontal cortex is less likely to be utilized than the amygdala when under toxic stress conditions (Oral et al., 2016). This impacts the child because the function of the prefrontal cortex is to subdue impulsive behavior and the amygdala's function is to enable impulsive behavior; thus, leading to the child having more impulsive behaviors (Oral et al., 2016). Overall, changes in the brain's structure at a young age can have long-lasting negative impacts on a child's cognitive development.

### **Sensory Domain**

Ryan et al. (2017) researched the impact of trauma on an individual's sensory system. When a child's brain is developing and they are exposed to trauma, the structures of the brain filtering sensory information can be adversely affected (Ryan et al., 2017). This can present as difficulties with sensory modulation, such as over responding to stimuli (Ryan et al., 2017). When a child over responds to stimuli, he/she may have strong negative reactions to stimuli that are typically not noxious to people who can properly modulate sensory information (Ryan et al., 2017). Without proper intervention, the child's body will develop maladaptive responses when his/her sensory system is under stress (Ryan et al., 2017). Additionally, when the sensory system is impacted it can cause increased sympathetic processes, such as increased resting heart rate, increased muscle tone, difficulty sleeping, digestive difficulties, and emotional dysregulation (Ryan et al., 2017).

Sharpe Lohrasbe and Ogden (2017) studied how children who have experienced trauma develop dysregulated arousal patterns. The researchers found a correlation between children who have experienced trauma and their parents having dysregulated arousal patterns (Sharpe Lohrasbe & Ogden, 2017). This is because children imitate their parents' behaviors, so if the parents are behaving in a way that is dysregulated the child will learn to act in the same way

(Sharpe Lohrasbe & Ogden, 2017). Additionally, when parents are dysregulated they typically cannot engage in higher-level thinking processing required to meet the child's needs, which further puts the child at risk for developmental delays (Sharpe Lohrasbe & Ogden, 2017). This research relates to the parents of children in foster care because the parents may not be meeting their child's needs due to being dysregulated; thus, leading to the child requiring foster care services. Overall supporting the relationship between children in the foster care system, trauma, and appropriate sensory development.

### **Gross and Fine Motor Domains**

Wade, Bowden, and Sites (2017) studied the correlation between trauma and motor delays in children. Concluding, children exposed to maltreatment had five to seven times greater fine and gross motor impairments than the Peabody Developmental Motor Scales-2 (PDMS-2) evaluation tool's norms (Wade et al., 2017). More specifically, children who had physical and/or sexual abuse had the greatest motor impairments (Wade et al., 2017). Hanson, Jawad, Ryan, and Silver (2011) also studied gross motor development and children in the foster care system while utilizing the PDMS-2 to measure the motor function. Results indicated children in the foster care system had significantly lower gross motor scores compared to population norms (Hanson et al., 2011). This further supports the correlation between children in the foster care system, trauma, and motor development.

### **Cognitive and Social-Emotional Domains**

Jacobsen, Moe, Ivarsson, Wentzel-Larsen, and Smith (2013) analyzed children in the foster care system and their cognitive and social-emotional development. Researchers measured the children's cognition and social-emotional functioning at two-years-old and again at three-years-old (Jacobsen et al., 2013). The results depicted that at two-years-old, children in foster

care were significantly delayed in cognitive and social-emotional development when compared to their peers (Jacobsen et al., 2013). When the children were measured again a year later, the children in foster care had not made large enough gains to “catch-up” to the comparison group in their cognitive and social-emotional development (Jacobsen et al., 2013). Concluding that in order for children in foster care to reach their developmental potential, they will require screening to be promptly referred to appropriate services (Jacobsen et al., 2013). This research showcases the long-term developmental impacts trauma can have on a child. Additionally, the importance of being screened within the foster care system for developmental delays so appropriate intervention can be provided.

### **Overview of Screening Processes**

#### **Foster Care Screening Process**

A significant amount of research links childhood adversity to increased risks for developmental, motor, mental, sensory, behavioral, and social-emotional deficits in children within the foster care system. However, there is limited evidence supporting the use of a standardized screening process to detect such delays upon entering the foster care system. In 2006, the American Academy of Pediatrics (AAP) released a statement highlighting the importance of completing a routine developmental screening for children placed in the foster care system (Hodges et al., 2016). Currently, the AAP recommends that children in foster care should receive a comprehensive developmental evaluation within 30 days of entering the system (Hodges et al., 2016). Early screening procedures help identify children who may require outside services. If early intervention is provided, the child can further gain skills to combat future delays. Although the AAP recommends this course of treatment, it is not a regulated protocol to follow. Children in the foster care system may change medical providers and caregivers



frequently or may come in and out of the system at various times throughout their lives. Therefore, the ability to consistently screen individuals within the system is challenging. Additionally, most communities lack the resources to screen all children, causing an increase of undetected delays (Hodges et al., 2016). One way communities can increase their resources is through the use of volunteers or students to complete work for their organization. OT students would be an optimal fit to complete screenings for children within the foster care system to help determine if children need to be referred for an in-depth evaluation or other services. Furthermore, the implementation of a universal screening tool and system is necessary to detect such delays for children within the foster care system.

### **Occupational Therapy Screening Process**

The OT process first begins with a referral or request from a physician or another professional for services (Shotwell, 2014). In regards to the pediatric population, a referral may come from a pediatrician, medical provider, case manager, or educators (Shotwell, 2014). Next, the occupational therapist is responsible to accept and respond to the referral by completing a thorough screening of the child being referred for services. The occupational therapist will complete the screening process using methods that are appropriate for the client's age, gender, medical and functional status, as well as consideration of the individual's cultural background (Shotwell, 2014).

During the screening process, the occupational therapist gathers preliminary information about the client to determine whether further OT evaluations are warranted (Shotwell, 2014). Typically, the occupational therapist will look through the child's records and interview caregivers and/or guardians of the child. The occupational therapist may also conduct a brief screening test and observe the client while interacting with the environment (Shotwell, 2014).

This process helps the occupational therapist determine the client's current level of function and performance. The occupational therapy practitioner will then discuss the screening results with the caregivers/guardians, the party who made the referral, and client (Shotwell, 2014). If the screening warrants further evaluation, the occupational therapist will arrange a comprehensive evaluation for the child (Shotwell, 2014). The comprehensive evaluation will further analyze the child's current level of occupational performance to determine what factors are influencing the child's ability to engage in occupations (Shotwell, 2014).

### **Implications of the Screening Process**

Overall, the referral and screening process are critical components to detecting developmental delays a child is experiencing that is impacting their ability to engage in desired occupations. However, occupational therapists are unable to complete the screening process without appropriate referrals from medical providers or other professionals that are part of the individual's team. As previously mentioned, children within the foster care system are at higher risk to experience developmental, physical, mental, sensory, behavioral, and social-emotional deficits than children who are not in the foster care system. Additionally, children within the foster care system are at higher risk to go undetected for such delays impacting occupational performance due to frequent changes in medical providers and caregivers. Therefore, it is important to educate medical professionals, social workers, case managers, caregivers, and other licensed professionals who work with children in foster care about the importance of consistently screening for developmental delays. The results of developmental screens also aids caregivers with determining appropriate services and treatment options for the child if it is needed.

## **Occupational Therapy Students and Screening Procedures**

Occupational therapy (OT) students are required to complete coursework to understand the OT process, including how to perform screenings. OT students can complete screenings under the supervision of a licensed occupational therapist. Thus, to learn how to screen individuals, actively participating in the screening process is a great opportunity. Additionally, by students screening individuals in the community, it aids that population in having a higher chance for being screened and knowing if they require further services.

### **Academic Preparation**

The Accreditation Council for Occupational Therapy Education (ACOTE) develops standards OT programs must meet throughout the student's educational curriculum (American Occupational Therapy Association, 2019b). These standards are critical learning needs the OT students must be competent in by the completion of their occupational therapy degree. The ACOTE standards also create a guide for educators as these standards influence course material.

ACOTE standard B.4.4. indicates students must evaluate occupational performance through the use of standardized and non-standardized assessment tools (American Occupational Therapy Association, 2019b). ACOTE standard B.4.7 indicates students must be able to interpret standardized test scores and ACOTE standard B.4.26 states that students must understand and discuss machaims of referring clients to OT and/or external professions (American Occupational Therapy Association, 2019b). These ACOTE standards are core competencies to have while completing screening procedures for children in the foster care system. However, these academic standards also emphasize that OT students have the skill set to complete this task while in school.

## **Active Learning**

The purpose of active learning is for the person to have accountability of direct engagement in the learning process (Harris & Welch-Bacon, 2019). By OT students screening individuals in the community, it would be a form of active learning as they have a responsibility to engage in the direct experience. Harris and Welch-Bacon (2019) researched the correlation between active learning and people's cognitive functions. They divided people's cognitive functions into the categories of higher and lower functions (Harris & Welch Bacon, 2019). Lower functions encompassed remembering, understanding, and applying, and higher functions entailed analyzing, evaluating, and creating (Harris & Welch Bacon, 2019). They found 61 articles which supported active learning can improve lower cognitive functions and 58 articles demonstrating active learning can aid with higher cognitive functions (Harris & Welch Bacon, 2019). These results support the idea it would be beneficial for OT students to engage in active learning, such as by administering screening tools.

According to Hooper (2006) active learning paired with client experiences should be implemented into OT programs in order to increase patient-centered practice and gain skills to develop therapeutic relationships (Hooper, 2006). Hooper (2006) studied a highly recognized OT program and found even though students were engaging in tasks that had active learning components, students did not typically take it upon themselves to directly apply the information to practice (Hooper, 2006). Hooper (2006) determined in order for students to directly apply classroom material to a client's experience they need to have "linking opportunities," such as direct interactions with clients. If OT students had the opportunity to administer screening tools to individuals in the community, it would allow the students to link academic knowledge to their own experience with a client.

## **Service Learning**

Service learning entails active participation in an educational experience that additionally helps meet societal and community needs (Currie-Muller & Littlefield, 2018; Maloney & Griffith, 2013; Meyers, 1999). In the most basic form, service learning provides students opportunities to aid underserved populations in the community (Meyers, 1999). In order for service learning experiences to have optimal outcomes, the opportunity must have the following components: structure that allows the student adequate time to provide service as well as reflect on the experience, students must provide high-quality service to the community, and the service must provide students with a hands-on opportunity to use skills and knowledge (National Service-Learning Clearinghouse, 2011). Additionally, there must be an equal partnership with the students and community participants to ensure collaboration and benefit all parties involved (National Service-Learning Clearinghouse, 2011).

## **Benefits of Service and Active Learning**

Noteworthy researchers conclude students and communities are both benefited by active and service learning. For students an organized, structured, meaningful, and effective learning experience will foster the following concepts: intercultural and multicultural skills and awareness, personal and professional growth, opportunities to apply skills and knowledge in real-world situations, promote problem-solving and critical thinking, practice ethical decision-making, and enrich personal and professional networking (Chakraborty & Proctor, 2019; Currie-Mueller & Littlefield, 2018; Eyles & Giles, 1999; Maloney & Griffith, 2013; Meyers, 1999). However, according to a meta-analysis conducted by Warren (2012) for students to receive the benefits from the service and active learning opportunities there must be time for the students to reflect on the experience either by themselves, with their professors, the faculty of the

community partnership, or peers. As students communicate their experience, new knowledge, and concerns with others it increases their understanding of the benefits the opportunity provided (Warren, 2012).

Within service and active learning partnerships students work with other professionals, thus, increasing the students' interprofessional communication skills and knowledge of professions (Chakraborty & Proctor, 2019). During this process, students will also have the opportunity to further understand and develop their own therapeutic communication style while working with various populations (Maloney & Griffith, 2013). Lastly, while engaged in service learning opportunities students can gain professional self-efficacy and chances to demonstrate professional leadership (Maloney & Griffith, 2013). All of these skills are critical for students to learn, understand, and develop before transitioning into the workforce. Gaining these skills will help OT students provide optimal, holistic treatment to their future clients.

OT education is designed to prepare future practitioners for the demands and challenges of current practice. For educators, service and active learning experiences are a powerful tool to keep students engaged with active participation in the classroom and within the community (Eyler & Giles, 1999). Service and active learning aids student's understanding and translation between theoretical classroom-based concepts and actual practice (Currie-Mueller & Littlefield, 2018). Additionally, service learning opportunities are most successful when they are employed to align directly with course objectives and match the mission statements of both parties involved (Currie-Mueller & Littlefield, 2018). Overall, service and active learning have a positive impact on student outcomes, such as increased retention of academic knowledge, and improvements with cognitive, behavioral and communication competence (Currie-Muller & Littlefield, 2018; Warren, 2012).

## **Risk Factors of Service and Active Learning**

Despite the benefits, there are also challenges within higher education programs and community partnerships to create service and active learning experiences. First, benefits of service learning are deeply rooted in student reflection, understanding, and active participation (Geller et al., 2016; Warren, 2012). Therefore, students must be invested and engaged in their experiences to truly receive the benefits (Geller et al., 2016; Warren, 2012). To ensure a quality service learning experience, educators must integrate rich self-reflection (Geller et al., 2016; Warren, 2012). Additionally, both the community and students must be committed to the partnership throughout the experience for optimal outcomes (Geller et al., 2016). According to Geller et al. (2016) community-based organizations measure success with tangible products, while educators measure success based on student learning outcomes and objectives. Thus, finding a middle ground so both parties can satisfy their associated needs is a challenge to service and active learning experiences. Another risk to long-term service and active learning experiences with community-based organizations and higher education is that community demographics are always changing and emerging (Leiderman, Furco, Zapf, & Goss, 2002). Therefore, the need for the community will vary with time, which makes communication between community organizations and higher education partnership vital to appropriate services (Leiderman et al., 2002). Lastly, the connections and depth of experiences with each community member and student may vary depending on circumstances that occur during the experience (Leiderman et al., 2002). Developing an active and service learning experience can be time-consuming and have unexpected challenges. However, researchers, community-based organizations (CBO's), and educators conclude the process yields positive and powerful outcomes for both the students and community (Geller et al., 2016).

## **Community Benefits**

Service learning programs have various benefits to the community, as they are rooted in serving others. Service learning partnerships with community organizations have been noted as a practical and effective method to expand students learning outside the classroom (Horwitz, 2012). Additionally, this learning style provides opportunities for students to develop skills necessary for community-based practice as a future occupational therapist (Howitz, 2012). According to Geller et al. (2016) community-based organizations partner with educational programs for four reasons. First, because students serve as extra working hands for their program to better service their clients and to help fulfill the CBO's mission. Second, students have new and unique perspectives to the CBO's which helps the CBO continue to improve and expand (Geller et al., 2016). Third, CBO's consider the partnership as a way to expose and teach others about their organization to aid future generations to continue their mission (Geller et al., 2016). Fourth, CBO's will engage in service learning partnerships to gain new support and resources for their organization to better serve their clients (Geller et al., 2016). Service and active learning opportunities can help strengthen communities while integrating meaningful community services and enriching student learning (Horowitz, 2012).

### **UND OTD Learning Opportunity**

The University of North Dakota (UND) Occupational Therapy Department shares components of their mission with the UND School of Medicine and Health Sciences' mission (UND Department of Occupational Therapy, 2018). Encompassed within these missions are to serve the public through: 1) teaching and preparing highly skilled entry-level occupational therapists, 2) scholarly and creative activity, and 3) service (UND Department of Occupational Therapy, 2018). This also correlates with the overall mission statement of UND, which advises



students to provide services to their community, be inclusive, seek out diversity, and engage in community leadership (UND, 2019). These missions can be met by providing students with active and service learning opportunities. There are research findings that support a positive correlation between active learning opportunities and improved self-efficacy as future practitioners, development of interpersonal skills and therapeutic communication style, and opportunities to demonstrate professional leadership (Currie-Mueller & Littlefield, 2018; Hooper, 2006; Maloney & Griffith, 2013). Thus, active and service learning is beneficial for both the students and the population they are serving.

### **Ecology of Human Performance**

The authors of this scholarly project have created a product that is an active and service learning opportunity through an elective educational course developed for the UND OT program. This course is guided by the Ecology of Human Performance (EHP) model to structure the design of the course. EHP is a framework which analyzes the person, their tasks, and their ability to perform tasks within a given context (Dunn, Brown, & McGuigan, 1994). An assumption of this model includes a person and their context are interrelated and dynamic (Dunn et al., 1994). Thus, in order to understand an individual's performance range in given tasks, the therapist must always consider the individual's context. This model is optimal to use with children in the foster care system as these children's contexts are continually changing, impacting their ability to engage in daily tasks. Children within the foster care system are being removed from their previous context and are being placed in novel contexts. Therefore, it is important to consider the child's context in relation to their ability to complete daily tasks. Additionally, the EHP framework is designed for interprofessional teams to support collaboration (Dunn et al., 1994). Furthermore, EHP outlines how to analyze one's personal variables including their sensorimotor,

cognitive, and psychosocial variables, all of which can be impacted by trauma (Dunn et al., 1994).

The other context that is focused on for this scholarly project is the context of the students in the UND OT Program. The course, *OT 599 Special Topics: Occupational Therapy Screening* class has been developed based on the occupation-based model of EHP. This model emphasizes health-promotion and preventive rehabilitation for individuals across the lifespan (Dunn et al., 1994). This course encompasses students' understanding and application of preventative care for children in the foster care system. This course also integrates health-promotion through the application of routine screening procedures. Students will provide this health-promotion and preventive care through the implementation of the screening tools (OTRT and Sensory Profile-2). Solidifying knowledge about the occupational therapy process and the impact on context and occupational performance. Furthermore, EHP was developed to promote interdisciplinary teamwork (Dunn, et al., 1994). This course is intended to promote interdisciplinary work within a community-based setting as students may be working directly with professionals in the foster care system including case managers and social workers.

### **Product**

The product was created to consist of two sections. The first section includes an evidence-based proposal to the Grand Forks, ND and Casper, WY social services foster care agencies. This proposal outlines the need to consistently screen children in the foster care system for developmental delays. Additionally, the proposal discusses a solution for this need, a potential partnership with UND's OT students to complete these screenings as an active learning experience. Students will utilize the two screening tools during the experiences, the Occupational Therapy Referral Tool and the Sensory Profile-2, both of which can help detect developmental

delays and aid in referring children to services if needed. Lastly, the proposal will outline the elective educational course students will be completing this active and service learning experience through. The second section of the product is the educational outline of the course titled, *OT 599: Special Topics Occupational Therapy Screening Process*. This course, guided by EHP, was developed for the UND OTD program and will be offered for students in their second year of the program. The course allows students to learn how to perform the screening process while providing these services to children in foster care.

### **Curricular Threads**

The active and service learning experience must align with the curricular design of the program to guarantee an optimal fit for the students, UND's OTD program, and the foster care agency. Upon reviewing the curricular threads of the OT program, it was determined the opportunity would be appropriate during the students second professional year in the program. This was based upon pertinent course content the student must be knowledgeable about prior to this experience. First and most importantly, students must take the courses titled, *OT Process and Practice Contexts* and *Evaluation of Occupational Performance*, as these courses allow students to delve deeper into the OT process and evaluation techniques (UND Department of OT, 2018). Within these courses students will engage in professional reasoning and critical thinking necessary to understand and apply the OT process in the art and science of evaluation (UND Department of OT, 2018). These are foundational skills a student must understand and be able to apply while completing a screening assessment and collaborating with the social service agency. Additionally, students will have previously taken the course, *Culture and Occupation* (UND Department of OT, 2018). This course is directed for students gain insight on the influence of culture on occupation and across the lifespan (UND Department of OT, 2018).

Lastly, the students will have taken the course titled, *Health and Disease Affecting Occupational Performance*. This course targets student understanding of normal development across the lifespan and how health influences occupational outcomes and performance (UND Department of OT, 2018).

Students in UND's OTD program must have foundational knowledge about the OT process. Additionally, they must understand influencing factors related to the OT process such as culture, normal development across the lifespan, and the effects of health on occupational performance. Once a student understands these course concepts, it will promote an optimal learning experience for screening children in the foster care system.

### **Screening Tools**

**OTRT Screening Tool.** The Occupational Therapy Referral Screening Tool was created by Alli Fox, MOTs and Emily Kollodge, MOTs (2019). The OTRT aligns with this scholarly project because it was also guided by the EHP framework. This tool assesses children in foster care (ages birth to 17 years and 11 months) for developmental delays, due to this population having a higher risk of being exposed to trauma that can impact development negatively. This would be beneficial for children who are at risk for developmental delays because the screening tool can aid in determining if the children need to be referred to additional services.

The purpose of the first section of the screening tool is to gather information about the child's demographics (Fox & Kollodge, 2019). Then, the child's psychosocial, cognitive, and sensorimotor skills, and his/her performance range and behaviors are analyzed (Fox & Kollodge, 2019). To gain a comprehensive overview of the child, his/her social, physical, and temporal contexts are also assessed (Fox & Kollodge, 2019). When the child is assessed his/her score will be matched to the age category he/she is in. The age categories are: birth-12 months, 1 year-2

years 11 months, 3 years-3 years 11 months, 4 years-5 years 11 months, 6 years-7 years 11 months, 8 years-11 years 11 months, and 12 years-17 years 11 months (Fox & Kollodge, 2019).

The scores fall into one of three categories: major concerns, minor concerns, or no current concerns (Fox & Kollodge, 2019). If he/she is in the major concerns area, it is recommended a referral is made to OT services (Fox & Kollodge, 2019). If the child is in the minor concerns category then a referral to OT services is recommended but not required, and the child should be monitored for increased concerns (Fox & Kollodge, 2019). If the child is in the no current concerns area the child is developing at a typical rate compared to age matched peers and there is no need for OT intervention at this point (Fox & Kollodge, 2019).

The OTRT can be administered by OT students, occupational therapists, social workers, case managers, teachers, counselors, daycare providers, and other licensed professionals who work with children (Fox & Kollodge, 2019). These administrators were chosen due to their knowledge of children's development (Fox & Kollodge, 2019). Not only does this screening tool grant the opportunity for foster children to receive an in-depth screening to determine their developmental capabilities, it also provides OT students the opportunity to engage in active learning by administering the tool.

**Sensory Profile-2.** The Sensory Profile-2 is a bundle of five different assessments (Dunn, 2014). There is the Infant (birth to 6 months), Toddler (7 to 35 months), Child (3 to 15 years), Short (3 to 15 years), and School Companion (3 to 15 years) Sensory Profiles (Dunn, 2014). All assessments evaluate the child's sensory patterns (Dunn, 2014). Furthermore, auditory processing, visual processing, touch processing, movement processing, body position processing, oral sensory processing, conduct associated with sensory processing, social emotional responses associated with sensory processing, and attentional responses associated with sensory processing

are addressed within the assessment (Dunn, 2014). This assessment is filled out by the caregiver or guardian of the child. The caregiver/guardian will answer if the child behaves in this manner almost always (90% or more of the time), frequently (75% of the time), half the time (50% of the time), occasionally (25% of the time), almost never (10% or less of the time), or does not apply (behavior has not been observed or does not apply to child) (Dunn, 2014). The information from this assessment is pertinent because it relays how the child's sensory system responds to the environment. By further examining the child's sensory system it can provide critical information to determine if further evaluations are warranted. This screening tool was developed by the same author who created the EHP model, thus, the product and the Sensory Profile-2 have identical foundational concepts.

### **Implementation of Screening Tools Opportunity**

The creators of the Occupational Therapy Referral Screening Tool (OTRT) had a goal for OT students at UND to implement the screening tool with children who are in the foster care system as an active learning experience. As previously mentioned, OT students can utilize the OTRT to screen children who have undergone trauma to detect developmental delays. Furthermore, the use of the Sensory Profile 2 (Dunn, 2014) will be an optimal screening tool for students to administer because it analyzes the child's sensory system and how his/her sensory system is impacting the child's performance in occupations and behaviors.

This opportunity allows students to receive hands-on experience with children in foster care and develop an in-depth perspective on how childhood trauma impacts development. The implementation of these two screening tools would allow students to practice administering screening tools to further understand the occupational therapy evaluation process. Lastly, the implementation of these screening tools allow students to work interprofessionally, enhancing

their interpersonal communication skills, and encourage students to advocate for occupational therapy services within the foster care system.

### **Controversial Aspects**

As previously mentioned, the product is a proposal for UND OTD students to participate in an elective class that entails screening children in the Grand Forks, ND and Casper, WY foster care systems. Although these students have gained extensive knowledge about the OT process throughout their education, this may be one of their first times administering the Sensory Profile-2 and OTRT. Thus, the results of the assessments may be skewed. However, students will be overseen by an assigned OT faculty member of the UND's OTD program to help discuss results, scoring, or questions from students while administering the assessments. This will help eliminate potential skewed results.

Another controversial aspect of the product is that the OTRT is an unstandardized screening tool. Although, this screening tool was chosen because it was created specifically for children in the foster care system. By administering the screening tool to children in the foster care system, it will allow the opportunity for norms of the screening tool to be produced.

## **Chapter III: Methodology**



Prior to the development of this product, literature was gathered by utilizing databases provided by UND including PubMed, CINAHL, and ERIC. Key terms in the search were foster care, screening tools, developmental delays, trauma-informed care, health outcomes, occupational therapy, occupational therapy education, active learning, and service learning. Other credible websites utilized to gather information for the development of the product are the following: The American Occupational Therapy Association (AOTA), American Journal of Occupational Therapy (AJOT), the North Dakota's Department of Human Services and Casey Family Programs. Additionally, credible websites, research articles, and other peer-reviewed materials were critiqued and reviewed.

After conducting a review of the literature, the authors determined two unmet needs. First, was a routine developmental screening process for children in foster care. Children in foster care were the chosen population to screen due to evidence indicating they receive inconsistent medical care and are at increased risk for developmental delays. The second need was for occupational therapy students to engage in active and service learning experiences while receiving higher education. Based on the literature review, there is a positive correlation between the amount of opportunities to apply skills and knowledge to real-world situations and academic retention, personal and professional growth, problem-solving and critical thinking (Chakraborty & Proctor, 2019; Currie-Mueller & Littlefield, 2018; Eyer & Giles, 1999; Maloney & Griffith, 2013; Meyers, 1999). Gaining these skills during their academic careers will help OT students provide optimal treatment to future clients.

In order to meet the identified needs the authors synthesized information to provide an evidence-based proposal via PowerPoint to the Grand Forks, ND, and Casper, WY foster care agencies. This proposal consists of two sections. The first section is an educational session for professionals who work with children in the foster care system about the importance of routinely screening children for developmental delays. The second section describes how this need can be met with a partnership opportunity between the foster care agency and UND OTD students through the development of an elective educational course. The course titled, *OT 599: Special Topics Occupational Therapy Screening Process* was designed for students to actively engage by screening children in the foster care system for developmental delays.

The Ecology of Human Performance (EHP) model (Dunn, Brown & McGuigan, 1994), was an optimal framework for the development of this product for a variety of reasons. First, EHP outlines how to analyze one's personal variables including their sensorimotor, cognitive, and psychosocial variables, all of which can be impacted by trauma (Dunn et al., 1994). Second, EHP emphasizes health-promotion and preventative rehabilitation across the lifespan (Dunn et al., 1994). This is applicable to the product as the course encompasses health-promotion and preventative measures through the application of students completing screening producers for children in the foster care system. This model also is also intended to promote interdisciplinary work within community-based settings (Dunn et al., 1994), this again will be evident as students are completing an active and service learning experience while completing developmental screenings. Lastly, this model was chosen because the premise of the course, for students, is to learn more about the impact trauma has on human development for children in the foster care system (Dunn et al., 1994).

While designing *OT 599: Special Topics Occupational Therapy Screening Process*, the authors determined screening tools used by students engaging in the active and service learning experience. Upon review of various developmental screening tools, the OTRT was chosen as it was designed for screening children who have previously experienced trauma (Fox & Kollodge, 2019). In addition to the OTRT, the authors determined the Sensory Profile-2 (Dunn, 2014) would be an optimal supplemental screening tool to utilize during the course, since the OTRT does not critically screen for sensory difficulties a child may experience as a result of trauma (Fox & Kollodge, 2019).

Subsequently, the authors determined when it would be appropriate for OTD students to engage in this course. Therefore, UND's OTD curriculum outline was examined to determine what year/semester would be adequate for students to engage and succeed in this course. Upon review, it was determined that students must acquire foundational skills before participating in the course. Skills such as understanding the OT process, human development across the lifespan, occupational therapy evaluation, and the impacts of health on occupational performance.

Overall, the implementation of this product is beneficial for both parties involved, UND OT students and children in the foster care system. OT students will gain further understanding of the OT screening process and impact of the environment on occupational performance while providing services to an underserved population. The foster care systems will benefit from the implementation of this product as children will receive screening and referral to medical and/or community services that are currently not being utilized. Once children receive these screenings, students can make appropriate referral recommendations as necessary for children to be further assessed for services.

## **Chapter IV: Product**

*The Role of Occupational Therapy  
with the Foster Care System:  
Implementation of Routine  
Screening Procedures*

*By: Sydney Gayton, MOTS and Hannah Merges, MOTS*

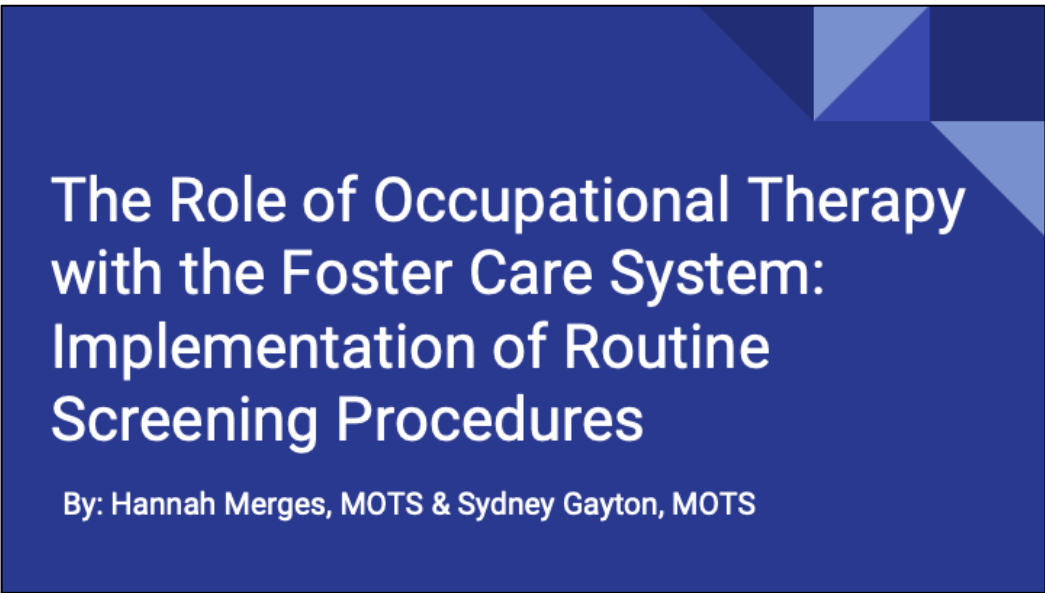
## Product Introduction

The product is comprised of two sections.

<b>Section 1:</b> Educational Proposal to Foster Care Agencies	<b>Section 2:</b> UND Educational Course <i>OT:599 Special Topics Occupational Therapy Screening Process</i>
<p>Content</p> <ul style="list-style-type: none"> <li>● Evidence-based PowerPoint presented to the Grand Forks, ND and Casper, WY foster care agencies.</li> <li>● Goals of the presentation are:               <ul style="list-style-type: none"> <li>○ Discuss with foster care employees and families about the correlation between childhood trauma, foster care, and developmental delays.</li> <li>○ Discuss the importance of completing routine development screening procedures.</li> <li>○ Educate about the scope of occupational therapy practice.</li> <li>○ Outline potential partnership with UND's OTD program.</li> </ul> </li> </ul>	<p>Content</p> <ul style="list-style-type: none"> <li>● Course syllabus               <ul style="list-style-type: none"> <li>○ ACOTE standards</li> <li>○ Learning Objectives</li> </ul> </li> <li>● Outline of learning experiences               <ul style="list-style-type: none"> <li>○ 2 on-site experiences completing developmental screenings for children in the foster care agency.</li> </ul> </li> <li>● Course Assignments</li> <li>● Course Assignment Rubrics</li> <li>● Weekly Facilitation Guides</li> </ul>

**Section 1**

**Educational Proposal to Foster Care Agencies Via PowerPoint**



# The Role of Occupational Therapy with the Foster Care System: Implementation of Routine Screening Procedures

By: Hannah Merges, MOTS & Sydney Gayton, MOTS



## Goals of Presentation

- Discuss with foster care employees and families about the correlation between childhood trauma, foster care, and developmental delays.
- Discuss the importance of completing routine developmental screening procedures.
- Educate about the scope of occupational therapy practice.
- Outline potential partnership with UND's OTD program.

## Children in Foster Care, Trauma, and Developmental Delays

- 90% of children in the foster care system have experienced trauma (Stein et al., 2001)
- Trauma may alter the brain's structures, impacting the following domains:
  - Sensory system
  - Fine and gross motor skills
  - Social-emotional development
  - Cognition
  - Behavior

(Hanson et al., 2011; Jacobsen et al., 2013; Oral et al., 2016; Ryan et al., 2017; Wade et al., 2017)

According to Stein et al. (2001) about 90% of children in foster care have experienced trauma. Examples of trauma include community and/or domestic violence, variations of abuse and/or neglect (physical, sexual, emotional, psychological), having someone close to them pass away (biological caregivers), unstable or unlivable housing conditions, or caregiver abandonment (Dorsey et al., 2011; Lynch et al., 2017; Stein et al., 2001).

Multiple studies have been conducted to understand the impact of childhood trauma. Researchers have found trauma impacts children's ability to reach developmental milestones and can alter the brain's structures.

**Structural Aspects:** Oral et al. (2016) researched the physiological response to toxic stress such as abuse, neglect, and household dysfunction with children. Concluded when a child experiences prolonged toxic stress it can alter structures of the brain (Oral et al). Stress impacts structural components such as the hippocampus, prefrontal cortex, and amygdala (Oral et al., 2016). When the hippocampus undergoes toxic stress it impacts the child's ability to retain information, therefore, it can impact the child's ability to learn new information. Trauma can also impact the child's amygdala (emotional part of the brain) therefore, it can result in increased impulsive behaviors (Oral et al., 2016).

**Sensory Aspects:** Structural aspects of the individual sensory system may also be altered, including the individual's sensory filter (Ryan et al., 2017). This may impact the child's ability to respond to stimuli, the child may be hyporesponsive or hyperresponsive (Ryan et al., 2017). These changes can impact the rest of the body, such as increased sympathetic processes (e.g. increased resting heart rate), increased muscle tone, difficulty sleeping, digestive difficulties, and emotional dysregulation (Ryan et al., 2017).

**Gross and Fine motor:** Wade, Bowden, and Sites (2017) studied the correlation between trauma and motor delays in children. Concluding that children exposed to maltreatment had five to seven times greater fine and gross motor impairments than the norms created for the PDMS-2 (Wade et al., 2017). Additionally, Hanson, Jawad, Ryan, and Silver (2011) studied gross motor development and children in the foster care system. Results indicated that children in the foster care system had significantly lower gross motor scores compared to population norms (Hanson et al., 2011).

**Social Emotional Development & Cognition:**

Jacobsen, Moe, Ivarsson, Wentzel-Larsen, and Smith (2013) analyzed children in the foster care system and concluded that children in foster care were significantly delayed in cognitive and social-emotional development when compared to their peers.

# Foster Care Screening process

- In 2006, American Academy of Pediatrics, released a statement highlighted the importance of routine screening for developmental delays for children in the foster care system.
  - Recommended
    - Within 30 days of entering the system a child should receive a comprehensive evaluation for developmental delays.

(Hodges et al., 2016)

As previously mentioned, there is a significant amount of research that links childhood adversity to increased risks for developmental, physical, mental, sensory, behavioral, and social-emotional deficits in children within the foster care system. However, there is limited evidence supporting the use of a standardized screening process to detect such delays upon entering the foster care system.

In 2006, the AAP released a statement highlighting the importance of completing a routine screening for developmental delays for children placed in the foster care system (Hodges et al., 2016). AAP currently recommends that children in foster care should receive a comprehensive developmental evaluation within 30 days of entering the system (Hodges et al., 2016). Early screening procedures will help identify children who may require outside services.

## Why is screening children in the foster care system important?

- Early screening procedures are correlated with higher detection rates of developmental delays.
- Routine screening procedures are also correlated with increased detections rates of developmental delays.

(Hodges et al., 2016)

Routine screening procedures are a source of health-promotion and preventative measures. Additionally, if early intervention is provided, the child can further gain skills to combat future delays.

## Reasons children in the foster care system are not being routinely screened

- Frequent changes in medical providers, caregivers, and home environments.
- Lack of resources to screen all children.
- Lack of communication
  - Medical providers & caregivers.

(Hodges et al., 2016)

## Solution to Unmet Need

Lack of community resources vs. Available resources

Community Resource that is available = UND OTD students

Our proposal is to have students complete screening procedures for a class, while obtaining their occupational therapy degree.

Thus far we understand, there is an unmet need of completing routine screenings within the foster care population. We also understand that children in the foster care system are at higher risks for having developmental delays.

One of the reasons children are being underscreened is due to lack of community resources to complete annual developmental screenings. Community resources including lack of funds (money) and people to come and complete these screenings for children. One identified solution for this lack of resources is having students become this resource for the foster care agencies in the community. Students could complete this screening opportunity for a school course.

Specifically, occupational therapy students have the qualifications to conduct routine screening procedures for developmental delays. These students are required to understand the OT screening process while pursuing their occupational therapy degree. Additionally, this is a standard students must meet in order for their associated school to be accredited.

# The Role of Occupational Therapy

## **Practice area: Pediatrics**

- OTs may inadvertently work with children who are in the foster care system.
  - Settings: early intervention, school-based OT, outpatient clinic, etc.

## **Emerging practice area: childhood adversity/trauma.**

- Foster care

(Haradon, 2001; Lynch, Ashcraft, Paul-Ward, Tekell, Salamat, & Scheffkind, 2017)

Main practice area: Pediatrics

Many occupational therapist work in pediatrics will inadvertently work with children who are also in the foster care system (Haradon, 2001). This gives a more in-depth perspective of this population's needs and how OT's can address them.



## Occupational Therapy Scope of Practice

### Skills and Training:

- Evaluate and screen individuals across the life span.
  - Children's developmental milestones.
- Use meaningful activities to help children participate in occupations that promote physical health, mental health, and overall well-being.
- Provide services that optimize motor, social, sensory, emotional, behavioral and cognitive skills.
  - All of which may be impacted by trauma.

(Haradon, 2011 & Ward, 2009)

OT practitioners are becoming key contributors to working with children who experience early childhood adversity and/or are in the foster care system as this is an emerging field for the profession (Lynch, Ashcraft, Paul-Ward, Tekell, Salamat, & Scheffkind, 2017).

Occupational therapists are uniquely trained to use meaningful activities to help children participate in occupations that promote physical health, mental health, and overall well-being (Lynch et al., 2017). Therefore, within the context of children in the foster care system occupational therapists are contributors to provide services that will optimize the child's development of motor, social, sensory, emotional, behavioral, and cognitive skills (Haradon, 2011). These are all areas that can be impacted by childhood trauma (Paul-Ward, 2009). Additionally, occupational therapists can advocate with the foster care system to address the developmental needs of the children in efforts to take preventative action (Lynch et al., 2017; Paul-Ward, 2009).

# OT Screening Process

## Steps:

- Receive referral, contacted by foster care agency, or contacted by foster care family
- Gather preliminary information
  - Health records (physical and mental), previous services
- Caregiver interview
- Complete standardized or non-standardized screening
  - Assessment, observation, interview, etc.
- Discuss results
- Make referral as applicable

(Shotwell, 2014)

**Overview:** During the screening process, the occupational therapist will gather preliminary information about the client to determine whether further OT evaluations are warranted (Shotwell, 2014). Typically, the occupational therapist will look through the child's records and interview caregivers and/or guardians of the child. The occupational therapist may also conduct a brief screening test and observe the client while interacting with their environment (Shotwell, 2014). This process helps the occupational therapist determine the client's current level of function and performance. The occupational therapy practitioner will then discuss the screening results with the caregivers/guardians, the party who made the referral, and client (Shotwell, 2014). If the screening warrants further evaluation, the occupational therapist will arrange a comprehensive evaluation for the child (Shotwell, 2014). The comprehensive evaluation will further analyze the child's current level of occupational performance to determine what factors are influencing the child's ability to engage in occupations (Shotwell, 2014).

This is critical to the referral and screening process are critical components to detecting developmental delays a child is experiencing that is impacting their ability to engage in desired occupations. However, occupational therapists are unable to complete the screening process without appropriate referrals from medical providers or other professionals that are part of the individual's team

## *OT 599: Special Topics Occupational Therapy Screening*

### Outline:

- Elective course for students interested in screening children in the foster care system for developmental delays.
- Course curriculum involves direct experience applying the OT screening process to children in the foster care system.

Students will take this class after their second year in the OT program. At this time in the educational careers students will have the skills needed to successfully complete this partnership.

## ***OT 599: Special Topics Occupational Therapy Screening***

### **Course Details:**

- 2 on-site experiences completing screening for developmental delays
  - Multiple children can be seen by one student at on-site experience
- Referral recommendations for clients
- Students are supervised by a licensed OT
- Screening process is guided by the Ecology of Human Performance Model

Course details: OT 599: special Topics Occupational Therapy Screening.

Students will have previously gained skills regarding the OT screening process in previous coursework and on level 2 fieldwork experiences. Therefore, will be competent in this skill set prior to completing the course. This is an integrative course so students will have the opportunity to integrate previous knowledge into their experience while completing the screening procedures.

The course allows students to participate in 2 on-site experiences where they will conduct screening procedures on the children (this may include caregiver interview). Additionally, depending on the needs of the clients, students will have the opportunity to conduct screenings on more than one family during the on-site experience. (This is depended on the needs of the foster care system at the time of course)

Next, based on the results of the screenings, students will write up a referral report to give to the parents. This reports will recommend either watching the child for a period of time before completing another screening or will recommend further evaluation by OT, PT, psychology, etc.

All students will be overseen by a licensed OT, therefore, they can conduct screenings legally.

# Ecology of Human Performance

- Emphasis on health-promotion and preventive measures through assessment of sensorimotor, cognitive, and psychosocial person variables.
- Evaluates the individuals context and its influence on performance range.
- Students will analyze context throughout the screening process
  - Focuses on the following contexts:
    - Physical, social, cultural, temporal
- Interdisciplinary communication

(Dunn, Brown, & McGuigan, 1994)

EHP is a framework which analyzes the person, their tasks, and their ability to perform tasks within a given context (Dunn, Brown, & McGuigan, 1994). An assumption of this model includes that a person and their context are interrelated and dynamic (Dunn et al., 1994). Thus, in order to understand an individual's performance range in given tasks, the therapist must always consider the individual context. The Ecology of Human Performance Model focuses on the following concepts: physical, social, cultural, and temporal. This model is optimal to use with children in the foster care system as these children's contexts are continually changing, impacting their ability to engage in daily tasks. Children within the foster care system, are being taken out of their previous context and are being placed in novel contexts. Therefore, it is important to consider the child's context in relation to their ability to complete daily tasks.

The other context in focus for this opportunity is the students in the UND OT Program. The course, *OT 599 Special Topics: Occupational Therapy Screening* class has been developed based on the occupation-based model of EHP. This model emphasizes health-promotion and preventive rehabilitation for individuals across the lifespan (Dunn et al., 1994). This partnership opportunity encompasses students' understanding and application of preventative care for children in the foster care system. Also, this model encompasses health-promotion through the application of routine screening procedures. Students will provide health-promotion and preventive

care through the implementation of the screening tools (OTRT and Sensory Profile-2). Both the Sensory Profile-2 and the OTRT screening tools are used to analyze an individual's context in relation to their performance range, or ability to perform occupations. Therefore, these are optimal tools to use during this partnership opportunity. The implementation of the opportunity will solidify knowledge about the occupational therapy process and the impact on context and occupational performance. Lastly, EHP was developed to promote interdisciplinary teamwork (Dunn, et al., 1994). This partnership intended to promote interdisciplinary work within a community-based setting, between professionals in the foster care system and OT students.

## Advantages:

- Students provide as a community resource
  - Will provide screening tools and appropriate referrals for children in the foster care agency.
  - No charge to foster care agency.
  - Children will receive appropriate services quicker which may improve their overall quality of life and decrease medical costs.

There are advantages for this partnership between the foster care agency and the UND OT program.

For the community: Students will provide as a resource to fulfill the current unmet need within this population. Students are also providing services free of charge. Overall, the implementation of the partnership and conducting routine screenings can eliminate future medical costs for the community.

For clients: Routine screenings can further help detect the need for services. Therefore, clients can receive necessary services more quickly and combat future delays. If services are provided, clients can get the help needed and gain skills quicker.

For families: Routine screenings can eliminate future medical costs.

# Limitations

- **Care coordination**
  - Increased communication among parties involved.
  - Increased communication among workers and foster care families to coordinate annual developmental screenings.
- **Increased workload**
  - Organization
    - Set up opportunity
  - New position for staff

Although this opportunity will greatly help the community including OT students and children in the foster care system, there are some limitations. First, there will need to be increased care coordination through all parties involved (social work, case management, UND OT department, clients/caregivers, foster care agency). Someone will have to organize and arrange the setup of this opportunity (talking to foster care families, getting them in contact with UND OT students, etc.). Overall, this will increase the workload of the foster care agencies staff.



## Summary

- Association between children in foster care, trauma, and developmental delays.
- The role of occupational therapy working with children in the foster care agency.
- Foster care screening process and why children are not being routinely screened for developmental delays.
- Potential solution to fit this unmet need in the community.

## Discussion

Feedback?

Questions?

How can we make this work together?

# References

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# References

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- Oral R., Ramirez, M., Coohey, C., Nakada, S., Walz, A., Kuntz, A., ... Peek-Asa, C. (2016). Adverse childhood experiences and trauma informed care: the future of healthcare. *Pediatric Research, 79*(1-2), 227-233. <https://doi-org.ezproxylr.med.und.edu/10.1038/pr.2015.197>

# References

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- Wade, T. J., Bowden, J., & Sites, H. J. (2018). Child maltreatment and motor coordination deficits among preschool children. *Journal of Child & Adolescent Trauma, 11*(2), 159-162. doi: 10.1007/s40653-017-0186-

**Section 2**

**UND Educational Course**

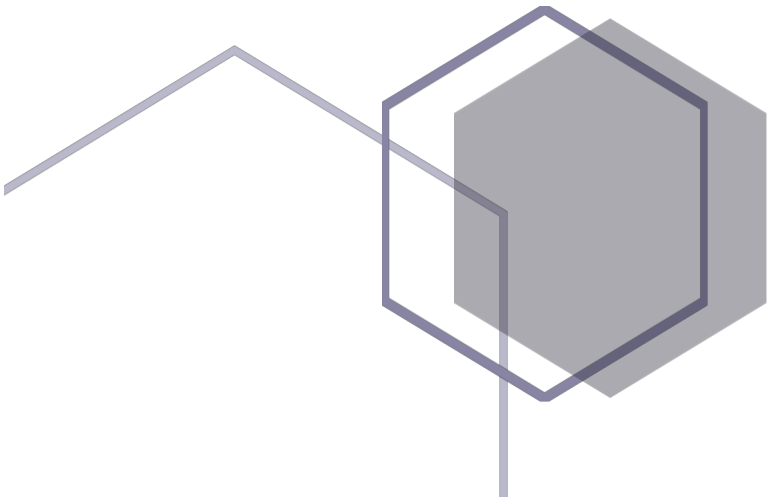
**OT 599: Special Topics Occupational Therapy Screening Process**



**OT 599**

**Special Topics:  
Occupational Therapy  
Screening Process**

An elective class with direct engagement in the OT process by screening children in the foster care system. This course offers experience working in the Grand Forks, ND and Casper, WY communities with an underserved population.



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**OT 599**  
**Special Topics: Occupational Therapy Screening**  
**Fall/Spring Semester Year 2**  
**University of North Dakota**  
**1 Credit**

**COURSE DESCRIPTION:**

Throughout this course, students will apply the occupational therapy (OT) process while completing screening assessments with children in the foster care systems in either Grand Forks, ND or Casper, WY. Students will build upon their skills relating to critical thinking, interpersonal communication, hands-on learning, and generalization to their future practice. Students will also experience the dynamic interactions of interprofessional teamwork with social workers/employees of the foster care agencies, and collaboration with families of the children. This experience allows OT students to partake in a community-based setting that will benefit their learning, while also benefiting the children in the foster care system.

**RELATIONSHIP OF COURSE TO CURRICULUM DESIGN:**

Prior to taking this course, students have participated in the OT process and service delivery including referrals, screening, evaluation, intervention, discharge planning, and referral recommendations. Therefore, students have the skills to understand the art and science behind OT evaluation. Students will have previous knowledge of professional and critical reasoning skills, as well as, interprofessional communication skills from prior course work. This course ties together information about the OT process, specifically the screening and referral process. Thus, the thread of utilizing these skills will be tightly linked together working directly with the Grand Forks and Casper social service foster care agencies. Students will be able to apply previous educational and clinical knowledge into the application of this course while working in the community. Additionally, this course addresses the thread of Diversity and Inclusion with an emphasis on cultural competency as students will be working with an underserved population in the community. Furthermore, this course will address the curriculum thread of Professional Identity as students will be able to integrate and directly apply their professional communication skills while developing and maintaining therapeutic relationships with clients and caregivers, as well as advocating for OT services. This course will prepare students to participate in OT service delivery for upcoming Level II Fieldworks A and B in the following semesters.

**CONCEPTUAL FRAMEWORK:**

*OT 599 Special Topics: Occupational Therapy Screening* class has been developed based on the occupation-based model of the Ecology of Human Performance (EHP). The model of EHP emphasizes health-promotion and preventative rehabilitation for individuals across the lifespan (Dunn, 2017). This course encompasses students' understanding and application of preventative care for children in the foster care system. This course also encompasses health-promotion through the application of routine screening procedures. Students will provide this health-promotion and preventive care through the implementation of the screening tools (OTRT and Sensory Profile-2). This implementation will solidify knowledge about the occupational therapy process and the impact on context and occupational performance. Furthermore, EHP was developed to promote interdisciplinary teamwork (Dunn, 2017). This course is intended to promote interdisciplinary work within a community-based setting.

**ACOTE 2018 STANDARDS:** B.1.2., B.1.3., B.4.1., B.3.3., B.4.3., B.4.4., B.4.5., B.4.6., B.4.7., B.4.8., B.4.20., B.4.23., B.7.1., B.7.2., B.7.3.

**INSTRUCTOR:**

Name: TBD

Office Number: TBD

Phone number: TBD

Students wishing to meet with the instructor for more than 15 minutes should check for office hours posted on the instructor's office door to arrange for a mutually agreeable time.

**TEXTBOOK/SUPPLIES:**

**Required:**

1. American Occupational Therapy Association (2014). Occupational therapy practice framework: Domain and process (3<sup>rd</sup> ed.). *American Journal of Occupational Therapy*, 68(Suppl. 1), S1– S48. doi: /10 .5014/ajot .2014 .682006.
2. Myott, F., Hall, L., Rackley, M., & Busch, A. (2016). *Developmental milestones guide (3<sup>rd</sup> ed.)*. Coastal OT Connections, LLC.
3. Sames, K.M. (2015). *Documenting occupational therapy practice (3<sup>rd</sup> ed.)*. Upper Saddle River, NJ: Pearson.

**Required Memberships**

OTA membership. Available at: <http://aota.org/>

**COURSE FORMAT/MEETS:** Special Topics: Occupational Therapy Screening is a one-credit elective course held for six weeks. The course is a mixture of lecture, discussion, and community practical experience.

**ACCOMMODATIONS:**

Students who are requesting disability accommodations for their courses are expected to register with Disability Services for Students (DSS). How to register can be found at [Disability Services for Students](#) or by contacting DSS at 701-777-3425 (190 McCannel Hall)

For students in Casper, WY: once registered with UND DSS, the student will need to provide recommendations to the Disability Support Services Counselor at Casper College and work with that office to arrange delivery of the accommodations as necessary.

It is the student's responsibility to register and obtain verification from UND DSS and notify his or her instructors and/or Academic Fieldwork Coordinator to request and arrange for accommodations.

When requesting and working out arrangements for the specific accommodations, the student may be asked to provide proof of support from DSS (DSS Verification Accommodation document) updated each semester) to his or her course instructor(s) and to the Casper DSS if Casper DSS are assisting with accommodation delivery.

Students in Grand Forks authorized by the DSS office for test-taking accommodations should schedule exams through their course instructor. If the course instructor is unable to arrange for

the specific accommodation students sign up with UND Testing Services for an accommodated test. Students in Casper can schedule through the Testing Center at Casper College. All scheduling on both locations must be completed at least two weeks in advance of the scheduled exam. Due to limited time and space students may be required to complete tests at alternate times.

## **TITLE IX:**

### **Non-Discrimination Statement:**

As part of its commitment to providing an educational environment free from discrimination, UND complies with Title IX of the Education Amendments, which prohibits discrimination and harassment based upon sex in an institution's education programs and activities. Title IX prohibits sexual harassment, including sexual violence, of students at UND-sponsored activities and programs whether occurring on-campus or off-campus. UND will take prompt action to investigate and resolve reports of sexual harassment or sexual violence in accordance with Title IX. It is important for students to understand that faculty are required by federal law to report to the Title IX Coordinator any incidents of sexual violence they become aware of, even if those incidents occurred in the past or are disclosed as part of a class assignment. UND's Title IX coordinator is Donna Smith, Director of Equal Employment Opportunity/Affirmative Action, 401 Twamley Hall, 264 Centennial Drive, Stop 7097, Grand Forks, ND 58202-7097, 701-777-4171, [donna.smith@und.edu](mailto:donna.smith@und.edu).

For further information, see the UND OT Student Manual or the [Division of Student Affairs & Diversity](#).

### **ACHIEVEMENT MEASURES:**

Student achievement will be measured by the student's ability to participate in assigned application-oriented in-class activities, class participation, examination, oral presentation, and written assignments.

### **GRADING:**

Written & Verbal Assignments = 130 points

Exams and Quizzes = 50 points

Grades and Percentages:

92 - 100%= A Marked Excellence

84 - 91%= B Superior

76 - 83% = C Average

68 - 75%= D Low (Not passing in courses in OT major)

Below 68% = F

A student with 75% or less at mid-term will receive a deficiency from the UND Registrar's office.

Extra Credit: There will be no extra credit offered in this course.

Submissions graded at less than 75% will receive zero points.

**COURSE OBJECTIVES:**

See attached course schedule

**ATTENDANCE:**

See OT Student Manual

**LATE ASSIGNMENTS:**

See OT Student Manual

**LAST DAY TO DROP:**

Fall Schedule

**UND INCOMPLETE POLICY:**

It is expected that students will complete all requirements for a course during the time frame of the course. For reasons beyond a student's control, and upon request by the student or on behalf of the student, an incomplete grade may be assigned by the instructor when there is reasonable certainty the student will successfully complete the course without retaking it. The mark "I," Incomplete will be assigned only to the student who has been in attendance and has done satisfactory work up to a time within four weeks of the close of the semester, including the examination period, and whose work is incomplete for reasons satisfactory to his or her instructor. Please refer to the college catalog for the full policy.

**LINE OF COMMUNICATION:**

Student -- Instructor -- Chairperson -- Assoc. Dean, Health Sciences - Dean, School of Medicine & Health Sciences

## **Learning Objectives:**

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1. Students will identify how life history impacts childhood development and occupational participation.
2. Students will demonstrate proficiency in the OTRT and Sensory Profile-2 screening tools before engaging in the on-site screening process.
3. Students will demonstrate respect for a diverse population and seek to understand their cultural beliefs, values, and occupations when interacting with foster care families and agencies.
4. Students will display therapeutic use of self while interacting with the children and their families evidenced by the foster families' satisfaction with the process.
5. Students will actively present themselves in a manner that aligns with the American Occupational Therapy Association's (AOTA) Code of Ethics and AOTA Standards of Practice when interacting with the foster care families and agencies.
6. By the end of the course, students will successfully complete the OT screening process and will be able to identify referral recommendations upon interpreting screening outcomes.
7. By the end of the course, students will demonstrate the unique value of OT through the screening process to other disciplines in the community.

## **ACOTE Standards Encompassed Within Learning Objectives:**

B.1.2., B.1.3., B.4.1., B.3.3., B.4.3., B.4.4., B.4.5., B.4.6., B.4.7., B.4.8., B.4.20., B.4.23., B.7.1., B.7.2., B.7.3.

**SCHEDULE:**

Week	Topic	Readings/Assignments
Week 1	<p>Course Syllabus</p> <p>Discuss UND partnership with foster care agency</p> <p>AOTA Code of Ethics</p> <p>Review OT screening process</p> <p>Article discussion</p>	<p>Sames: Chapter 13- <i>Referral and Screening</i></p> <p><i>Bring AOTA Code of Ethics to class.</i></p> <p>Hodges, L. K., Landin, D. M., Nugent, L. M., &amp; Simpson, M. P. (2016). Early developmental screening for children in foster care. <i>Journal of Child and Family Studies</i>, 25, 2155-2163. doi:10.1007/s10826-016-0397-6</p>
Week 2	<p>Practice OTRT and Sensory Profile-2 Interpretation of results</p> <p>Introduction to clinical sites round 1 (<i>Students will be given dates/times/location of clinical experience. Students will be given background information about children they will be screening</i>)</p>	<p>Read and interpret OTRT and Sensory Profile-2 Manuals.</p>
Week 3	<p>On-site Clinical Experience #1</p>	<p><b>No Class</b></p> <p><i>Preparation:</i> Review client/caregiver information prior to clinical experience. Read Developmental Milestones Guide.</p> <p>Bring UND name badge and screening tools to on-site clinical experience.</p>

Week 4	<p>Debriefing and class discussion about the on-site experience</p> <p>Interpretation of results</p>	<p><b>On-Site Reflection #1 Due</b></p> <p>Finish Scoring Assessments (if applicable).</p>
Week 5	<p>Introduce a Screening Report Assignment</p> <p>In-class work time</p> <p>Introduction to clinical sites round 2 (<i>Students will be given dates/times/location of clinical experience. Students will be given background information about children they will be screening</i>)</p>	
Week 6	<p>On-Site Clinical Experience #2</p>	<p><b>No Class</b></p> <p><i>Preparation:</i> Review client/caregiver information prior to clinical experience. Read Developmental Milestones Guide.</p> <p>Bring UND name badge and screening tools to on-site clinical experience.</p>
Week 7	<p>Debriefing and class discussion about the on-site experience</p> <p>Interpretation of results</p> <p>In-class work time</p>	<p><b>On-site Reflection #2 Due</b></p> <p>Finish Scoring Assessments (if applicable).</p>
Week 8	<p>Course-wrap up</p>	<p><b>Screening Report Assignment(s) Due</b></p> <p><b>Course Reflection Assignment due</b></p>
	<p>Final Exam TBA</p>	

**OT 599**  
**Special Topics: Occupational Therapy Screening**  
**Assignments**

**Assignment 1: On-site Reflection #1 & #2**

**Points Possible: 40**

**Learning Objectives Met:**

- Students will demonstrate respect for a diverse population and seek to understand their cultural beliefs, values, and occupations when interacting with foster care families and agencies.
- Students will display therapeutic use of self while interacting with the children and their families evidenced by the foster families' satisfaction with the process.
- Students will actively present themselves in a manner that aligns with the American Occupational Therapy Association's (AOTA) Code of Ethics and AOTA Standards of Practice when interacting with the foster care families and agencies.

**ACOTE Standards Addressed:** B.4.1., B4.4., B4.23., B.7.1., B.7.2., B.7.3.

**Description:**

**Purpose:** Engage in the self-reflection process based on on-site experiences completing the occupational therapy screening process.

**Overview:** Reflect on experiences while screening children in the foster care system. Specific reflection questions will be indicated below.

**Audience:** Course Instructor/Classmates.

**Format:** This will be in a narrative format. Follow APA guidelines.

**Evaluation of Quality of Work:** Outlined in the rubric.

**Part 1: On-Site Reflection #1**

**Points Possible: 20**

**Reflection Questions:** *(Please use the following questions to guide reflection, also refer to course learning objectives)*

1. Describe feelings/thoughts about the hands-on learning experience in the community.
  - What went well? What challenges were you faced with? Describe any unexpected challenges/problems that occurred.
  - What did you do to prepare yourself for this experience?
  - If you could re-do the experience, what would you do differently?
2. Describe the importance of utilizing a screening tool with this population.



- How can you apply this information/course concepts to future practice as an occupational therapist?

**Part 2: On-Site Reflection #2**

**Points Possible: 20**

**Reflection Questions:** *(Please use the following questions to guide reflection, also refer to course learning objectives)*

1. Compare and contrast this on-site experience to the previous experience.
  - a. What skills did you use during the experiences and how can you continue to use these skills as a future occupational therapist.
2. Reflect on ways your therapeutic use of self was utilized while interacting with other professionals, the child, and their families?
3. How do these on-site experiences relate to the following terms: Health-promotion, preventative care, advocacy, family-centered therapy, and client-centered practice and cultural competency.

## **Assignment 2: Screening Report**

**Points Possible: 50**

### **Learning Objectives Met:**

- Students will identify how life history impacts childhood development and occupational participation.
- Students will demonstrate proficiency in the OTRT and Sensory Profile-2 screening tools before engaging in the on-site screening process.
- By the end of the course, students will successfully complete the OT screening process and will be able to identify referral recommendations upon interpreting screening outcomes.

**ACOTE Standards Addressed:** B.3.3., B.4.4., B.4.5., B.4.6., B.4.7., B.4.8., B.4.20., B.4.23., B.7.1.

### **Description:**

**Purpose:** The purpose of this assignment is to become familiar with interpreting the results of occupational therapy screening tools to determine the need for further evaluation.

**Overview:** Develop a client-based screening report based on the client screened in this course. Students will take the information gathered during the screening process and while interviewing caregivers to develop an evaluation plan. The number of children each person will screen will be dependent upon how many people are in the class, the agency's need, and how many foster children and parents agree to participate.

**\*\*\*Note:** Students will be completing a screening report for each child they screen during the on-site clinical experience. Students will complete this assignment a **minimum of 2 times** for the course (one for each round of on-site experience).

**Evaluation of Quality of Work:** Outlined in the rubric.

### **Assignment 3: Course Reflection**

**Points Possible:** 40

#### **Learning Objectives Met:**

- Students will identify how life history impacts childhood development and occupational participation.
- Students will demonstrate respect for a diverse population and seek to understand their cultural beliefs, values, and occupations when interacting with foster care families and agencies.
- By the end of the course, students will demonstrate the unique value of OT through the screening process to other disciplines in the community.

**ACOTE Standards Addressed:** B.4.1., B.7.1.

#### **Description:**

**Purpose:** The purpose of this assignment is to reflect on the course, learning experiences, and course content. This assignment allows students to provide feedback to course instructors based on the instructional design of the course.

**Audience:** Course Instructor

**Format:** This will be in a narrative format. Follow APA guidelines.

**Evaluation of Quality of Work:** Outlined in the rubric.

**Reflection Questions:** *(please use the questions below to guide reflection paper & refer to course learning objectives. Complete reflection questions with a minimum of 3 sources/citations).*

1. Compare and contrast knowledge known before starting the course and after completing the course.
  - a. How did the on-site learning experience impact your learning? How it will help you carry out screenings in the future.
2. Describe personal strengths demonstrated and challenges endured throughout the course. How will these attributes influence you as a future OT practitioner?
  - a. Interacting interprofessionally and with caregivers/children.
3. How does this experience impact you as a future occupational therapist?
  - a. What skills will you use in the future?
4. How does this course relate to the following roles as an OT practitioner: community-based practitioner, advocate, educator, and consultant?

#### **Assignment 4: Course Participation & Student Performance Evaluation Form**

**Points Possible: 25**

##### **Learning Objectives Met:**

- Students will demonstrate respect for a diverse population and seek to understand their cultural beliefs, values, and occupations when interacting with foster care families and agencies.
- Students will display therapeutic use of self while interacting with the children and their families evidenced by the foster families' satisfaction with the process.
- Students will actively present themselves in a manner that aligns with the American Occupational Therapy Association's (AOTA) Code of Ethics and AOTA Standards of Practice when interacting with the foster care families and agencies.

**ACOTE Standards Addressed:** B.4.1., B.4.2., B.4.3., B.7.1.

##### **Part 1: Course Participation**

**Points Possible: 20**

##### **Description:**

Participation points will be earned in this course when students demonstrate active participation and engagement in class. Classroom discussion is an integral aspect of the course. Students are expected to complete assigned readings prior to class as it will contribute to successful course discussions. Expectations for students include the following: ask questions, introduce and analyze course content, share perspectives and ideas, use readings to generate assertions, respond to others, and reflect on material and professional issues. Expectations for course participation are outlined in the rubric.

##### **Part 2: Student Performance Evaluation Form**

**Points Possible: 15**

**Description:** Student performance will be monitored and scored during on-site clinical experience by the client's caregivers the student is completing the screening on. This evaluation form is to demonstrate consistency of student behavior/performance based on perceptions of both the course instructor and caregivers.

**\*\*\* Note:** If the student is completing screenings for more than one screening during the clinical experience. All scores will be average

### Student Performance Evaluation Form

Question	Score
Did the student introduce themselves?	0- did not introduce themselves 1- did introduce themselves
Did the student explain what occupational therapy is?	0- did not explain 1- partially explained 2- explained well
Did the student explain what developmental delays are and what can cause them?	0- did not explain 1- partially explained 2- explained well
Did the student explain the correlation between foster care and developmental delays?	0- did not explain 1- partially explained 2- explained well
Did the student explain the purpose of the screening?	0- did not explain 1- partially explained 2- explained well
Did the student describe the difference between the two screening forms well?	0- did not describe 1- partially described 2- described well
Was the student respectful?	0- no 2- yes If not, please explain:
Did the student conduct the screening process?	0- no 1- yes

Was the process overall enjoyable?	0- no 1- yes  If not, please explain:
Do you have any other additional comments?	If so, please state:

**Exams and Quizzes**

Points Possible: 50

ACOTE Standards Addressed:

B.1.2., B.1.3., B.4.1., B.3.3., B.4.3., B.4.4., B.4.5., B.4.6., B.4.7., B.4.8., B.4.20., B.4.23., B.7.1., B.7.2., B.7.3.

**OT 599**  
**Special Topics: Occupational Therapy Screening**  
**Grading Rubrics**

**On-Site Reflection Rubric**

<b>Grading Category</b>	<b>Points Possible</b>	<b>Points Earned</b>	<b>Comments</b>
<b>Included all Pertinent Information:</b> Answered questions outlined in assignment directions with rich detail and explanations. Personal thoughts and experiences were shared.	15		
<b>Formatting/APA:</b> Organized presentation, grammar and spelling, professional appearance, and signature.	5		

Total Points Earned:    /20

Instructor Feedback:



### Screening Report Plan Rubric

Grading Category	Points Possible	Points Earned	Comments
<b>Occupational Profile:</b> Includes client background and history, age, level of functioning, life roles/routines, context and environment, caregiver/client goals.	10		
<b>Objective:</b> Identification of evaluation methods, summary of results	10		
<b>Assessment Interpretations:</b> Interpretations of results, utilizes professional reasoning skills	10		
<b>Referral/ Plan of Care:</b> Clear problem statements, rational for OT services (further evaluation) or referral to other services, the indication of further evaluation assessments	10		
<b>Formatting/APA:</b> Organized presentation, grammar and spelling, professional appearance, and signature.	10		

\*\*\* **Note:** If a student completes more than one screening report after the on-site visit, the student will receive the average score from all reports completed.

Total Points Earned:    /50

Instructor Feedback:

### Course Reflection Rubric

Grading Category	Points Possible	Points Earned	Comments
<b>Course Expectations/Feedback:</b> Clearly articulated with rich reflection	5		
<b>Personal Strengths and Challenges:</b>	5		
<b>Learning Experiences:</b> Rich detail outlining information learned in course	5		
<b>Formatting/APA:</b> Organized presentation, grammar and spelling, professional appearance, APA reference page and signature.	5		

Total Points Earned:    /20

Instructor Feedback:

### Course Participation Rubric

Grade Level	Description
A	To earn the grade of an A: The student consistently demonstrates the application of assigned readings into course discussion. Students must consistently demonstrate ability to critically analyze and reflect on course material. Students must integrate past/ present academic and clinical experience to make assertions about course topics. Critically analyzes and reflections on peer assertions.
B	To earn a grade of a B: The student often demonstrates the application of course material to class discussion. The student often participates in class discussions. Occasionally analyzes course concepts to make assertions.
C	To earn a grade of a C: The student occasionally initiates class discussion. Student occasionally relates the discussion to previous academic knowledge and course concepts.

**OT 599**  
**Special Topics: Occupational Therapy Screening**  
**Session Outlines**

**Week 1 Facilitation Guide**

***Assigned Reading(s)***

Sames: Chapter 13- *Referral and Screening*

Hodges, L. K., Landin, D. M., Nugent, L. M., & Simpson, M. P. (2016). Early developmental screening for children in foster care. *Journal of Child and Family Studies, 25*, 2155-2163. doi:10.1007/s10826-016-0397-6

**Learning Objective(s):**

1. By the end of class, students will the screening and referral process.
2. By the end of class, students will discuss how children in the foster care system are at higher risk for developmental delays.
3. By the end of class, students will identify the benefits of completing the screening process.

- 
- Go over syllabus with class
    - a. Discuss dates with students for on-site experiences.
      - i. **\*\*Note:** There will be no class the weeks of the on-site experiences. However, students will have scheduled times that may or may not be outside of regular class time to implement screening tools to children in the foster care system. These times will be dependent upon the foster care agency and the family's/child's schedule.
    - b. Discuss assignment due dates and briefly discuss course assignments.
  - Discuss class expectations for the course.
  - Describe partnership with foster care agency (Grand Forks, ND or Casper, WY).
    - a. Location
    - b. Why partnership was created
    - c. Professions involved
  - Review the OT screening process
    - a. **Class Questions:**
      - i. Explain the OT Process.
      - ii. How are screenings different than evaluations?
      - iii. How do you know who (what population) to screen?
      - iv. What are the benefits of completing screenings?
      - v. Describe the implications of screening.

**Class activity:**

Get into groups of 2-3 and describe how screening children in the foster care system, relates to the AOTA Code of Ethics. Discuss the following terms:

- Autonomy, non-maleficence, beneficence, fidelity, justice, and veracity.
- Core values of the profession.

Come back as a large group to share thoughts and high points from the discussion.

**Article Questions:**

- Why are children in foster care are at a higher risk than the general population to have developmental delays according to Hodges et al. (2016)?
  - What are more reasons you can think of that were not listed in the article?
- What occupation based model comes to mind while explaining the correlation between foster care and developmental delays?
- What do you think about the statement: “However, most communities lack resources to evaluate all children so priority should be given to those who have the highest need (American Academy of Pediatrics 2010; Council on Foster Care, Adoption, and Kinship Care et al. 2015).”
  - How can this be addressed?
- What are the benefits of screening as early as possible?
- What developmental screening tools have you learned about during the program and/or have seen on fieldwork?

## Week 2 Facilitation Guide

### Learning Objective(s):

1. By the end of class, students will be proficient in the OTRT and Sensory Profile-2.
  2. By the end of class, students will identify the validity and reliability of the OTRT and Sensory Profile-2.
- 

1. Give students OTRT and Sensory Profile-2 Manuals
  - a. Students will pair up and be given 30 minutes to read over and discuss both manuals.
  - b. Answer the following questions: (*once for the OTRT and once for the Sensory Profile-2*).
    - i. What population is the screening tool used for?
    - ii. How is this tool administered?
    - iii. How is this tool scored?
    - iv. How do you interpret the results?
    - v. Describe the reliability and validity of the screening tool.
  - c. **Optional for Sensory Profile-2:** Complete case studies for an in-depth understanding of the interpretation of results. (Pg. 85 in the user manual)
    - i. This activity will help students understand how to interpret the results of the sensory profile and how to plan a full evaluation based on case-scenarios.
2. Give students assigned children for on-site learning experience.
  - a. Provide any background information received.
    - i. Contact information.
3. Leave time for clarification questions about the on-site experience.

## Week 4 Facilitation Guide

### Learning Objective(s):

1. By the end of class, students will discuss the implications of a child's life history in relation to their development and occupational performance.
  2. By the end of class, students will identify personal strengths and areas of growth while implementing screening tools.
- 

1. Break into small groups (3-5 students per group) and discuss the following questions. Then report back high-points from discussion to the class.

\*\*\* Note: these are the questions from **On-site Reflection #1 paper**.

- a. Describe feelings/thoughts about the hands-on learning experience in the community.
  - o What went well? What challenges were you faced with? Describe any unexpected challenges/problems that occurred.
  - o What did you do to prepare yourself for this experience?
  - o If you could re-do the experience, what would you do differently?
- b. Describe the importance of utilizing a screening tool with this population. How can you apply this information/course concepts to future practice as an occupational therapist?

\* Have one person, key take away points from class discussion.

\* Turn-in On-Site Reflection #1 assignment during this time to the course instructor.

2. Give time for students to finish scoring/interpreting results.

## **Week 5 Facilitation Guide**

### **Learning Objective(s):**

1. By the end of class, students will identify referral recommendations upon interpreting screening outcomes based on previous clinical experience.
  2. By the end of class, students will discuss the importance of referrals and/or recommendations upon screening children.
- 

1. Discuss Screening Report Assignment.
  - a. Give time for class questions.
2. In-class work time is provided for the students to start the Screening Report assignment (Assignment #2).
  - a. At this point, they have only engaged in one on-site screening, so the assignment will focus on that experience.
3. Introduction to clinical sites round 2.
  - a. Students will be given dates/times/locations of clinical experience.
  - b. Students will be given background information about children they will be screening.
    - i. Contact information will be provided.



## **Week 7 Facilitation Guide:**

### **Learning Objective(s)**

1. By the end of class, students will discuss ways they can utilize knowledge from on-site evaluation in future clinical practice.
  2. By the end of class, students will discuss how therapeutic use of self was used during on-site clinical experience.
- 

1. Break into small groups (3-5 students per group) and discuss the following questions. Then report back high-points from discussion to the class.

\*\*\* Note: these are the questions from **On-site Reflection #2 paper**.

- Compare and contrast this on-site experience to the previous experience.
  - What skills did you use during the experiences and how can you continue to use these skills as a future occupational therapist.
- Reflect on ways your therapeutic use of self was utilized while interacting with other professionals, the child, and their families?
- How do these on-site experiences relate to the following terms: Health-promotion, preventative care, advocacy, family-centered therapy, and client-centered practice and cultural competency?

\* Have one person, key take away points from class discussion.

\* Turn-in On-Site Reflection #1 assignment during this time to the course instructor.

2. Give time for students to finish scoring/interpreting results.

**Consent Form**  
*Occupational Therapy Student Educational Experience*  
*Screening for Developmental Milestones*

The University of North Dakota's Occupational Therapy Program is providing an educational experience for its students. These students benefit greatly through direct application of course material as well as active learning activities.

The caregiver/child will be partnered with an occupational therapy student. All students and screening procedures will be overseen by a licensed occupational therapy faculty member. The Sensory Profile 2 and the Occupational Therapy Referral Screening Tool (OTRT) will be used during the screening process. Additionally, occupational therapy students will complete a caregiver/child interview. These tools are used to ensure children in the foster care system are being screened for developmental milestones. Within occupational therapy services, developmental milestones include the individual's fine and gross motor skills, social-emotional development, cognition, behavioral, and sensory processing.

There are no foreseen risks that could occur from engaging in this experience. If the child acquires scores that deem him/her in need of occupational therapy services, the staff will provide contact information to set up an appropriate appointment.

Your participation is voluntary and your decision about participation will not compromise your relationship with the Department of Occupational Therapy or the University of North Dakota. Confidentiality of all personal data and information will be maintained. Any questions regarding the information above, please contact one of the individuals listed below.

By signing this consent form you are agreeing to participate in UND's occupational therapy student educational experience of using the OTRT, Sensory Profile-2, and brief interview.

\_\_\_\_\_  
Printed Name of Student(s)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Child

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent/Caregiver

\_\_\_\_\_  
Date

\_\_\_\_\_  
Course Instructor

\_\_\_\_\_  
Date

## **Chapter V: Summary**

The purpose of this scholarly project, *The Role of Occupational Therapy with the Foster Care System: The Implementation of Routine Screening Procedures*, was to address current unmet needs in the Grand Forks, ND and Casper, WY communities. Through our review of literature, there are two identified unmet needs. First, children in foster care are not being routinely screened for developmental delays upon entering the system. Second, students in occupational therapy programs are receiving limited active and service learning opportunities during their education. Therefore, the authors developed two sections within the scholarly project to fulfill these needs. The first section is an evidence-based proposal, via PowerPoint, to discuss a solution to the unmet needs with foster care agencies in the Grand Forks, ND and Casper, WY communities. Section two is the development of an elective educational course for UND OTD students.

The implementation of this scholarly project is dependent upon buy-in from gatekeepers. Primary gatekeepers have been identified as UND OTD faculty members and the directors of foster care agencies within Grand Forks, ND and Casper, WY. Communication with and between these gatekeepers is necessary for the implementation of this product. Once the elective educational course is deemed appropriate to integrate into the UND OTD program and it has been approved by the curriculum committee, motivation from students to take this course is essential. The authors of this scholarly project acknowledge the UND OT curriculum's multiple scholarly writing assignments. What this course offers is hands-on learning and service to the communities. An outline of the course is as follows. First, the course *OT 599: Special Topics Occupational Therapy Screening Process*, is an eight-week elective course for students. This course

may be offered in the second year of UND's OTD program in the fall, spring, or both semesters. Since this course is half the duration of a typical course, it offers flexibility for students and faculty members. It could potentially be offered four times during an academic school year with the options of twice within the spring semester and twice in the fall semester. The frequency will be dependent upon the demands of the foster care systems within these communities and the number of students willing to take the course. Another benefit of *OT 599: Special Topics Occupational Therapy Screening Process* is students' prior exposure to foundational material integrated into the course. Therefore, students will apply their accumulated knowledge during their hands-on experience of screening foster care children. The opportunity to have practical application of their skills is expected to generate student interest for this elective course.

The OTRT was chosen as a screening tool for the students to utilize as it was designed to screen children who have experienced trauma (Fox & Kollodge, 2019). The authors of the OTRT, Alli Fox and Emily Kollodge (2019), stated their goal of researching psychometric properties for this tool. Upon the scrutiny from the Institutional Review Board at UND, implementing the OTRT within this course would provide trials needed to demonstrate reliability and validity of the tool. The usefulness of this tool will be determined via feedback from the students, UND OT faculty, and foster care agencies' faculty.

A barrier to the implementation of this product may be the organization of foster care agencies' staff with coordinating the screening process. For the effectiveness of this course, professionals working at the foster care agencies will need to establish communication among all parties involved to plan, prepare, and implement the routine

screening procedures conducted by students. Initially, there would be an increase of care coordination needed by the foster care agencies. However, with continuation of the course it would centralize the screening process and ultimately decrease the workload of case managers by eliminating their need to seek screening services for the children. UND OTD students will be providing services free of charge as they are gaining invaluable experience and knowledge through this process. The community service provided by the students may be an incentive for the foster care agencies to have a partnership with UND's OTD program. Students taking the course may have limited experience working with children in the foster care system, which could be considered a drawback. However, this course will be offered to UND OTD students who have completed community experiences and coursework that provided a foundation of the needed skills. The students will further develop their knowledge of the OT process and communicating with clients, caregivers, and other professionals. Despite the limitations, this scholarly project would advocate for occupational therapy's role with children in foster care and the children's developmental needs.

The *OT 599: Special Topics Occupational Therapy Screening Process* course will be proposed to the University of North Dakota's Occupational Therapy Department with hopes of implementation into the occupational therapy doctoral curriculum. This scholarly project is unique in that it establishes a solution for two unmet needs, which are the foster care children's development and OT students' clinical knowledge. The authors created this scholarly project with the aspiration it will benefit the Grand Forks, ND and Casper, WY communities with a long-term goal to expand this learning experience to other cities. Recommendations moving forward with this scholarly project include OTD

students using this project as the foundation for their own capstone project. These students would begin the implementation process and develop a relationship and line of communication between the organizations. After these organizations are contacted and are willing to learn about the course, the first section of the product can be presented. From there, it is crucial there is respectful and ongoing communication between the foster care agencies and UND OTD faculty to effectively implement the course.

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