



## **Doctoral Occupational Therapy Capstone Report**

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OCTD 802: Capstone Scholarship  
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Student

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Date

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Capstone Coordinator

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Date

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Faculty Mentor

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Date

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Capstone Site

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Date

## Abstract

This doctoral capstone project explored the development, implementation, and evaluation of programs at the Down Syndrome Association of Greater Cincinnati (DSAGC) in promoting independence in young adults with Down syndrome. While there were many aspects of this project, there are three main activities highlighted in this capstone report. The first initiative was conducting research on the effectiveness of existing programs to determine how to best meet the needs of this population. From this research and hands-on work with this program, the “Guide to Independent Living” was created, which provides visuals and step-by-step guides for completing instrumental activities of daily living (IADLs). Another project was creating and teaching a class designed to improve independent living skills to young adults with Down syndrome. The outcomes of these projects highlight the importance of occupation-based interventions in non-clinical, community-based settings, as well as the need for ongoing support as individuals with Down syndrome transition to independent living.

## Introduction to the Doctoral Capstone

The doctoral capstone is a culminating project and experience for doctoral capstone students that occurs after all clinical and didactic courses are completed. The evidence-based project requires the student to relate theory to practice, synthesizing in-depth knowledge in a specific practice area. The experience provides an in-depth exposure to a concentration area. Throughout the project and experience, the student is mentored by the capstone site (recipient), the Xavier University Faculty Mentor, and the Doctoral Capstone Coordinator.

This capstone proposal section contains the capstone title, purpose, theoretical models used, content area, type of scholarship, and the relationship to the Xavier University Mission and the Department of Occupational Therapy Mission and Philosophy.

### Doctoral Capstone Title

Empowering Adulthood: Enhancing Independent Living Skills in Young Adults with Down Syndrome.

### Purpose of the Capstone Project

The purpose of the doctoral capstone is to evaluate functional independence levels in young adults with Down syndrome as they transition to independent living. The capstone includes research on existing programming at the Down Syndrome Association of Greater Cincinnati to determine what Instrumental activities of daily living (IADL) skills need to be targeted. This project also provides opportunities to implement occupational therapy into a non-clinical, community-based organization.

### Theoretical Models

Below is a brief description of the conceptual or theoretical model(s) used to frame this capstone project and how it was applied.

A model that I will be using to frame my work is the Social/Independent Living Model of Disability. This model describes how social participation does not have anything to do with the abilities of a person, but that the societal constructs that may prevent someone from fully being included in society. Understanding this model is important for my capstone because there are many societal standards and constructs that might prevent young adults with Down syndrome from living independently. To evaluate their needs, I will need to understand what barriers they face from society that affect their acquisition of independent living skills.

Another model that I will use to frame the work in my capstone is Social Learning Theory. This theory describes how individuals can learn through their interactions with others and just being part of a social environment. I will implement the Social Learning Theory into my capstone while working with the Find Your Way program. Some of the retreats in this program happen in large groups, so I will use this to help understand how skills are learned and retained in a group setting.

### Content Area

The goal of the doctoral capstone is to provide students with an in-depth exposure to one or more of the content areas. These include: clinical skills, research skills, program development and assessment, policy development, advocacy, education, and leadership. Students select a primary and secondary content area.

The primary content area used in this capstone is program development and assessment. This capstone project sought to examine the effectiveness of existing programming, as well as develop supplemental materials and classes for the existing program. The secondary content area for this project is leadership. Being the only person with occupational therapy background and skills in this community-based setting, it was necessary to take on leadership qualities. This was shown in providing occupation-based reasoning for different programs and spaces within the organization, as well as leading groups in different classes. It was important to be a leader in retreats, teaching classes, and throughout my daily role to highlight the occupational therapy perspective as a capstone student.

### Scholarship Type

Student capstone projects are considered scholarly studies. The project represents one of the four types of scholarship: (1) scholarship of discovery, (2) scholarship of application, (3) scholarship of teaching and learning.

The main type of scholarship represented in this doctoral capstone project is the scholarship of application. As an occupational therapy student in a non-clinical, community-based setting, it is important to be able to apply clinical expertise and reasoning into this capstone. By viewing situations through an occupational therapy lens, a wide range of knowledge is available to apply to a community-based setting.

## Capstone Relationship to Mission and Philosophy

The doctoral capstone is related to the Xavier University Mission and the Department of Occupational Therapy Mission and Philosophy.

### *Xavier University Mission*

*Xavier is a Jesuit Catholic university rooted in the liberal arts tradition. Our mission is to educate each student intellectually, morally and spiritually. We create learning opportunities through rigorous academic and professional programs integrated with co-curricular engagement. In an inclusive environment of open and free inquiry, we prepare students for a world that is increasingly diverse, complex and interdependent. Driven by our commitment to educating the whole person, promoting the common good, and serving others, the Xavier community challenges and supports all our members as we cultivate lives of reflection, compassion and informed action.*

### *Department of Occupational Therapy Mission*

*Our Mission is to educate and prepare future occupational therapists who respond to the occupational needs of a diverse, complex, interdependent, and ever-changing global society. Xavier University OTD graduates will practice as ethical, competent, and caring professionals using critical, creative, and reflective thinking and habits of lifelong learning. As professionals, Xavier University graduates will balance autonomous and collaborative decision-making to successfully navigate a variety of inclusive delivery systems in traditional and emerging practice areas where they implement theory-driven and evidence-based practice. Xavier University graduates will be leaders who model and advocate for justice for persons, groups, and populations. To promote occupational participation and advance the profession, our graduates will utilize, produce, and disseminate scholarly works.*

### *Department of Occupational Therapy Philosophy*

*We believe:*

- *Humans are biopsychosocial beings who are transformed by participation in occupation.*
- *Participation in meaningful occupations shapes human lives and is intrinsically connected to one's health and well-being.*
- *As members of intra- and inter-professional teams, occupational therapists form a dynamic and collaborative relationship with people, populations, and communities to maximize occupational participation and realize occupational potential.*
- *Best practice in occupational therapy is client-centered, occupation-based, theory-driven, evidence-based, and grounded in sound ethical principles.*
- *Students learn best through independent exploration coupled with active engagement in authentic and learner-centered learning experiences and self-reflection.*

### *Relationship*

Below is a description of the relationship between the doctoral capstone and the mission of the Xavier University and the mission and philosophy of the Department of Occupational Therapy meeting ACOTE standard D.1.3).

Individuals with Down syndrome are less likely than typically developing adults to live independently. My capstone project is focused on promoting independent living skills and encouraging more functional independence in young adults with Down syndrome. This aligns with the Xavier University OTD program because we are encouraged to model and advocate for justice for people, groups, and populations. As a Xavier University student, I am called to value

cura personalis, which recognizes the uniqueness and wholeness of each person. My capstone project will promote occupational participation for individuals at the Down Syndrome Association of Greater Cincinnati. I will recognize everyone I work with as an individual person with unique qualities. By implementing this project, I will also become a more competent occupational therapist in the by understanding the needs of a diverse population, and using critical, creative, and reflective thinking skills to promote my personal and professional development.



## Capstone Development Part I

Part I of the capstone development includes a literature review, site interview, and needs assessment. These form the foundation of the capstone project described in the following section of this proposal. This section provides documented evidence of ACOTE standard D.1.3 which states that “the doctoral capstone is an integral part of the program’s curriculum design’ and reflects the mission and philosophy of the program, contributes to the development of in-depth knowledge in a designated area of interest, and includes preparation consisting of a literature review and needs assessment” (ACOTE, 2023)

### Capstone Site

The capstone site is the organization in which the student partners to complete the project and experience. The site is selected in collaboration with the student, doctoral capstone coordinator, and the faculty mentor.

This capstone project was completed at the Down Syndrome Association of Greater Cincinnati (DSAGC). The mission of DSAGC is to empower individuals, educate families, enhance communities and together, celebrate the extraordinary lives of people with Down syndrome. A majority of this capstone project investigated DSAGC’s Find Your Way™ program, which is a series of retreats and tune-up classes for young adults (ages 18-34) to improve their independent living skills. The two retreats that coincided with this capstone included Cruise™ and Navigate™. Cruise™ is a day retreat for individuals who are already living independently to improve their skills and work towards new goals. Navigate™ is a weekend long retreat where individuals learn what it's like to plan a typical weekend. This targets skills such as grocery shopping, meal planning, cooking, communication, transportation, cleaning, and social engagement. While these were the main programs involved with this project, there were also opportunities to work with individuals throughout the lifespan, including play groups for individuals aged 0-5 and working with older adults.

### Literature Review and Needs Assessment

#### *Literature Review*

The doctoral capstone literature review was conducted in OCTD 604 (See Appendix A: Literature Table), OCTD 633 (See Appendix B: Scoping Review), and OCTD 705 (See Appendix C: IRB Application Problem Statement).

#### *Needs Assessment*

Needs Assessment for the doctoral capstone was completed in OCTD 604 in collaboration with the student, faculty mentor, and doctoral capstone coordinator and was used as the foundation for this doctoral capstone. The Needs Assessment contains parts: (1) review of the literature, (2) description of the problem, and (3) site interview. See Appendix D: Needs Assessment.

## Capstone Development Part II

The section contains the doctoral capstone proposal, which includes the goals and objectives, week-by-week project plan, and capstone evaluation plan. This section contains evidence that the doctoral capstone was “designed through collaboration with the student, a faculty member in the occupational therapy educational program who holds a doctoral degree, and an individual with documented expertise in the content area of the capstone” (ACOTE D.1.1, 2023), contains “goals/objectives, and a plan to evaluate project outcomes” (ACOTE, D.1.3), and that the site mentor (content expert) was “informed of the plan for and purpose of the doctoral capstone” (ACOTE D.1.2).

### Capstone Proposal

#### *Capstone Goals and Objectives*

Goals and objectives are defined for both (1) the capstone project and (2) the experience. The goals describe what students will learn or do, while the objectives define how this will be accomplished. Each goal and objective is listed with the proposed evidence of achievement for each. There is one table for the capstone project goals and objectives, and a separate table for the capstone experience. See Appendix E: Capstone Goals and Objectives for a Capstone Project Table and a Capstone Experience Table.

The doctoral capstone experience learning goals and objectives, as well as the project goals and objectives, were collaboratively developed by the student, faculty mentor, and doctoral capstone coordinator. All goals and objectives were reviewed with the site mentor. Evidence of this is provided in the site mentor-signed Memorandum of Understanding which contains the individual student goals and objectives. See Appendix F: Signed Memorandum of Understanding.

#### *Capstone Project Plan*

The capstone project plan consists of a Week-by-Week Project Plan and the procedures section of the IRB Application. Each was collaboratively developed by the student, faculty mentor, and doctoral capstone coordinator. See Appendix C: IRB application and Appendix G: IRB Letter for the Response to the IRB Application. See Appendix H: Week-by-Week Table for the planned capstone activities by week.

#### *Capstone Evaluation*

The capstone evaluation is determined by assessing the student’s ability to meet their capstone goals and objectives. The capstone evaluation is divided into two sections: (1) project and (2) experience and is completed at mid-term (approximately week 7) and again at week 14 (final). The mid-term and final capstone evaluations are completed and maintained on EXXAT/Prism.

### *Capstone Memorandum of Understanding*

A capstone Memorandum of Understanding (MOU) is executed prior to the start of the doctoral capstone and contains the roles and responsibilities of all parties, plans for evaluation, mentoring and supervision (ACOTE, 2023, D.1.4). See Appendix F: Signed Memorandum of Understanding.

## Capstone Implementation and Results

This section contains a description of the implementation of the capstone project, results, summary, and reflection. This section is completed during OCTD 802: Capstone Scholarship.

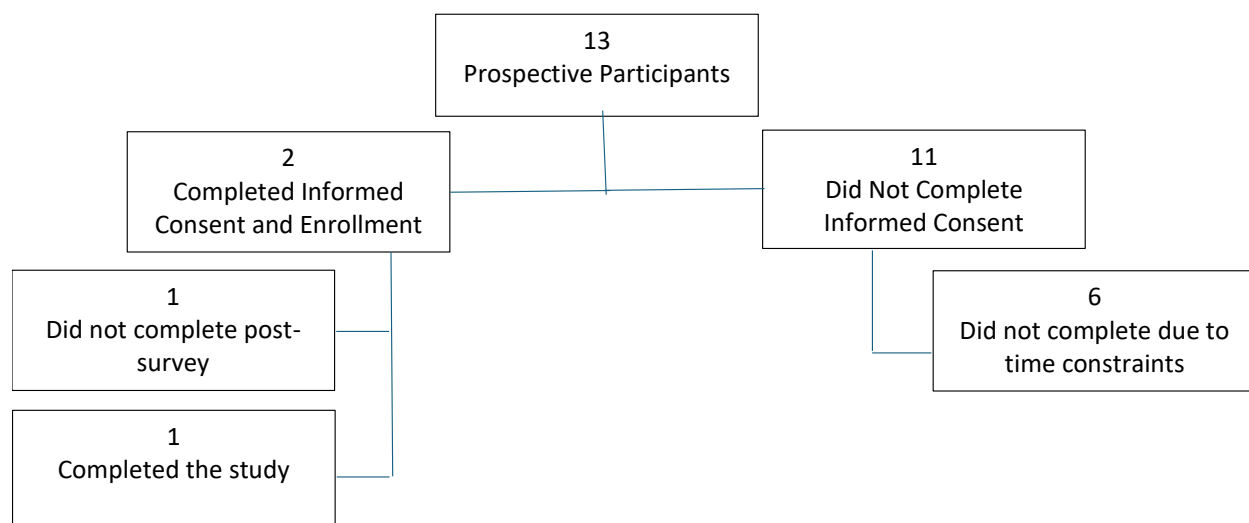
### Activity 1

**Empowering Adulthood: Enhancing Independent Living Skills in Young Adults with Down Syndrome.** This research study aimed to evaluate the effectiveness of existing programming at the Down Syndrome Association of Greater Cincinnati (DSAGC) in improving independent living skills in young adults with Down syndrome. Specifically, this research aimed to evaluate the Find Your Way™ program retreats. Find Your Way™ is a program focused on independent living, which offers different retreat experiences to practice life skills, and life skills classes to work on these goals throughout the year (DSAGC, 2025). The two retreats that this study sought to evaluate were Cruise™ and Navigate™. Cruise™ is a one-day retreat for those already living independently to practice skills and socialize with others who are in similar stages of life. Navigate™ is a weekend long retreat for individuals who are considering moving out within the next year, helping them practice what a typical weekend might look like for them.

### Description of the Participants

Participants in this study involved young adults with Down syndrome and their caregivers. Young adults with Down syndrome at the DSAGC include individuals ages 18-34. To protect participant's confidentiality due to the primary investigator's involvement in the retreats, specific demographic information was not collected in these surveys. However, all participants were in their late 20s or early 30s. A flow chart below represents the participants enrolled in this research study.

**Figure 1.**  
*Participant Recruitment*



### *Implementation/Methodology*

The Functional Independence Survey was created to evaluate changes in independent living skills before and after participation in Find Your Way™ retreats. This survey was created with the intention for caregivers to rate their young adult's skills in a variety of instrumental activities of daily living (IADLs). Skills addressed in the pre-post survey included, but were not limited to, grocery shopping, transportation, meal preparation, emergency response, communication, and social skills. Caregivers were instructed to use a scale to rate their young adult's independence in the addressed IADLs. After filling out the IADL scales, caregivers were invited to fill out three short response questions, providing more detail on goals, areas for improvement, and additional skill-acquisition classes that they believe their young adult would benefit from at the DSAGC.

Participants registered for the Cruise™ and Navigate™ retreats were contacted via email prior to their respective retreat weekends. Due to timing of the Institutional Review Board project approval, participants enrolled in Cruise™ were only able to be notified of this study three days prior to the retreat. Because of this timing conflict, none of the 6 participants registered for the Cruise™ retreat completed the pre-survey. However, 7 participants registered for Navigate™ were contacted two weeks prior to the retreat weekend to invite them to take part in the study. A pre-survey was sent to these caregivers, where the first question in the survey obtaining Informed Consent. Two out of the seven participants registered for Navigate™ completed the pre-survey. Only one participant then completed the post-survey.

### *Modifications*

The other portion of this research study aimed to have in-person interviews with young adults with Down syndrome and their caregivers to learn more about their current independent living skills, goals, and areas for improvement. However, none of the participants opted for participation in these interviews, so this portion of the research study was not completed. Originally, this project also aimed to have more survey participants. Because only one participant completed both the pre and post surveys data was analyzed more as a case study, rather than using Statistical Package for the Social Sciences software (SPSS) as planned.

### *Results*

The study results were separated into four categories: grocery shopping, kitchen tasks, household tasks, and communication. Embedded in these categories are also questions about higher level executive functioning, such as being able to follow multi-step directions. After completing this weekend retreat, this participant most improved his ability to complete kitchen tasks.

Prior to this retreat, this participant required minimal to moderate assistance for a variety of kitchen tasks, such as following a recipe, preparing a light meal, preparing a hot meal, and cleaning the kitchen after cooking. After completion of this retreat, his caregiver reported that he can now complete these tasks independently. His caregiver also reported improvements with grocery shopping, being able to navigate the store more independently. At the end of the

survey, his caregiver noted that all skills related to meal planning, grocery shopping, and kitchen cleanup were most improved from Navigate™.

While this participant made improvements in several reported areas through participating in this retreat, there were still areas of concern that his caregiver reported. The category in this survey that the participant required the most support in before and after participation in the retreat is household tasks. His caregiver reported needing maximal assistance for deep cleaning both before and after the retreat. A note was also included at the end of this survey that he needed a refresher on how to complete laundry.

At the end of the post-retreat survey, there was an option to share about any skills that young adults may benefit from in Tune-Up™ classes that have not already been offered. Tune-Ups™ are skill building classes that provide young adults opportunities to practice specific independent living skills, such as cooking, budgeting, transportation, and more. This participant's caregiver noted that it would be beneficial to have classes on emergencies, social media safety, identifying fraud, texting etiquette, and social etiquette in general. To meet some of these suggestions, handouts were created to encourage online safety, communication guidelines, and handling medical emergencies. These handouts were then placed in the "Guide to Independent Living," which is discussed below in Activity 2.

## Activity 2

**Guide to Independent Living:** An independent living skills binder was created to provide visuals, guides, and helpful tips for young adults with Down syndrome to reference as needed. This binder was developed after interacting with young adults, talking to parents and caregivers, and completing skilled observations of independent living skills throughout this capstone. It became evident that these individuals benefit from visual references, step-by-step guides, and handwritten materials to supplement their decision making, safety, and autonomy. The Guide to Independent Living reflects just some of these skills that were worked on throughout the capstone experience.

### *Description of the Participants*

This "Guide to Independent Living" binder was created intentionally for young adults ages 18-34 involved within the Find Your Way™ program at the DSAGC. However, resources and visuals in this binder can be applied throughout the lifespan. Younger adolescents can benefit from incorporating these skills into their daily routines earlier to promote independence and autonomy, while older adults can still use these handouts as references and refreshers for daily living.

### *Implementation/Methodology*

After being involved in a variety of programming, classes, and retreats at the DSAGC, it became evident that visual guides were a great resource for many of these individuals. There were opportunities for skilled observations of young adult's functional independence, conversations with caregivers, and learning from the staff at the DSAGC to understand what support young adults need to become as independent as possible. The "Guide to Independent Living"

stemmed from these hands-on experiences, hoping to set up individuals for success in parts of daily life that they may need more support with. This independent living binder was separated into sections based on different IADLs that young adults needed support with throughout the capstone project.

Sections in this binder include:

- Safety and First Aid
- Daily Schedules
- Online Safety
- Cooking
- Nutrition and Healthy Choices
- Meal Planning
- Grocery Shopping
- Laundry
- Cleaning
- Transportation
- Money Management
- Making Appointments
- Recipes

There are a variety of resources available in each of the sections mentioned. Handouts may include checklists, step-by-step instructions for completing tasks, visual guides, and general information on these tasks.

### *Results*

A physical guide was developed as an example for young adults and their caregivers to reference as needed. However, the “Guide to Independent Living” will be made available online so individuals can download all of it, or just the sections that they want. This will become available to all young adults that have been involved with the Find Your Way™ program in some capacity.

### *Activity 3*

**Tune-Up™ Class Creation:** After being involved in the Find Your Way™ program throughout the entirety of the capstone, part of this project involved creating class materials to teach a new Tune-Up™ class. This involved creating a presentation, handouts, worksheets, and teaching the class, which was focused on making healthy choices.

### *Description of the Participants*

Fifteen young adults with Down syndrome attended this Tune-Up™ class. Young adults ranged from 18-34 years old and were at different stages of their independent living journey. A couple of participants were already living independently, while many of the participants were still

living with their caregivers, planning to move out within the next year, or are just beginning the transition to young adulthood. Participants were split about evenly between male and female.

### *Implementation/Methodology*

After observing and participating in other Tune-Up™ classes, notes were made on the style of classes, framework for handouts/worksheets, and how to engage participants into actively participating in classes. A presentation on making healthy choices was created, mirroring the style of other Tune-Up™ classes. Throughout this presentation, there were built in times for sharing with the larger group, breakout activities, and lecturing. The presentation focused on the parts of a healthy diet, portion control, reading nutrition labels, and how to live a healthy lifestyle. Worksheets were then created that aligned with each of these topics, allowing hands-on practice and critical thinking to apply these concepts to participants' lifestyles.

### *Results*

All fifteen participants actively engaged in the Tune-Up™ class, sharing ideas for each main topic. With the assistance of volunteers, participants were able to complete their worksheets, learn from the presentations, and practice applying these concepts in real-time. Handouts with guidelines for reading nutrition labels, National Institute of Health recommended portion sizes, and MyPlate examples helped participants be successful in completing these activities. After participating in this lecture, participants were then able to identify and share with the group different ideas for maintaining a healthy lifestyle. The parts of a healthy lifestyle that were addressed in this group included ways to be physically active, drink more water, eat healthy foods, get more sleep, and promote relaxation.



## Capstone Discussion

The discussion section contains an interpretation of the results and explains their significance. This can include a connection to the broader context, evaluation of the significance, acknowledgement of limitations, and proposed future direction of research or unanswered questions.

### *Evaluation of the Captone Project (Activity 1) and Correlation with Literature*

The participants at the Navigate™ retreat this year were all in their late 20s or early 30s. According to Stephanie Dailey, the program director and young adult coordinator, this was an older group of individuals compared to some of her previous retreats. Research shows that as individuals with Down syndrome get older, they may have increased challenges for gaining functional independence (Graaf et al., 2018). Having participated in these retreats and programs, I have a deeper understanding of why it is more difficult for individuals to gain independence as they age. I believe that individuals who have relied on their parents, family, or caregivers for support throughout their development into adulthood may have less inclination to be fully independent. This is not to anybody's fault, but I think it makes sense why some individuals at this retreat mentioned that they may never want to move out of their parent's home.

Other individuals at this retreat were motivated to live fully independently, but they face significant health problems that require assistance for medical management. This coincides with current research, stating that some individuals with Down syndrome may be less likely to develop all functional skills due to the correlation between health problems and developmental skills (Graaf et al., 2018). However, seeing the determination and perseverance that individuals with health problems had to live independently, I believe there will be assistive technology interventions and aides that could assist these individuals as they transition to independent living. After spending so much time one on one with so many young adults with Down syndrome, I believe there is a "sweet spot" for interventions that can be the determining factor for someone's ability to live independently. Reaching independence will require several factors, including caregivers promoting independence of their young adult, intrinsic motivation in the young adult, and societal opportunities such as group smart homes and assistive technology. An individual with Down syndrome can only be as independent as their caregivers, families, and support systems allow them to be.

### *Recommendations for Practice, Policy, and/or Education*

Completing research on effectiveness of programs for young adults with Down syndrome has helped me to realize that there needs to be more research in general on occupational therapy and Down syndrome. I think there are many opportunities for growth in having occupational

therapists working with young adults with Down syndrome, yet healthcare systems aren't necessarily set up for this. There is a disconnect in services from adolescence throughout adulthood for individuals with developmental disabilities, so increasing programs and occupational therapy services throughout the lifespan is critical.

Having my capstone at a non-profit organization has made me appreciate the role of occupational therapy in non-clinical settings. Organizations like the Down Syndrome Association of Greater Cincinnati who serve individuals across their lifespan are great opportunities for occupational therapists. Occupational therapists have a unique skillset where we can complete task analyses, evaluate the needs of populations, and create individualized goals and interventions to help individuals achieve them. I would recommend to future capstone students or occupational therapy practitioners to consider applying their knowledge base to a non-clinical, community-based setting to challenge themselves and facilitate independence and positive changes in the population.

### *Evaluation of the Capstone Project (Activity 2) and Correlation with Literature*

My inspiration for the "Guide to Independent Living" stemmed from firsthand experiences with individuals involved in the Find Your Way™ program. This relates back to my evaluation of my first activity, discussing how individuals with Down syndrome will require motivation, support, and challenges from their families to push them to become independent. Throughout my research, I discovered the lack of resources available to individuals with Down syndrome, especially when it comes to health literacy.

There is an increasing urge for caregivers and families of individuals with developmental disabilities to empower their young adult to act on their own health literacy to increase functional independence (Geukes et al., 2019). I believe this is where occupational therapists can use their unique skillsets to tailor health information to best fit the needs of young adults with Down syndrome. If occupational therapy practitioners can tailor interventions to encourage young adults with Down syndrome to be more engaged in their health and understand their needs, they can be more successful (Chandrasekaran et al., 2025).

After these conversations and research on health literacy, I was inspired to put this information into practice. Not only is it important for individuals with Down syndrome to have the skillset they need for managing their health, but they also need to understand all other aspects of their IADLs and personal safety. Creating visuals and step-by-step guides to understanding IADLs, safety, and other aspects of independent living is just one-way occupational therapists can create personalized interventions for individuals with Down syndrome. While these visuals won't be the answer to all the young adults involved in the Find Your Way™ program, it will give young adults an opportunity to trial what works for them and discover other learning opportunities.

### *Recommendations for Practice, Policy, and/or Education*

I have had many conversations with peers on what inspired them to pursue occupational therapy, and many responded with the fact that they would like to work with individuals with

developmental disabilities. While this is what motivates many occupational therapists to enter this field, the occupational therapy curriculum does not require a class focused on developmental disabilities. I recall when Down syndrome was covered in my pediatric courses, there were maybe two slides in the lecture describing Down syndrome. This did not even include common interventions, needs of individuals with Down syndrome throughout their lifespan, or an occupational therapist's role with Down syndrome.

Because of the disconnect between occupational therapy coursework and developmental disabilities, I believe there should be more education on developmental disabilities, occupational therapist's roles, and hands-on opportunities to apply these skills beyond school-based practice. I understand the importance of learning through experiences, but I also believe that a designated course on developmental disabilities will not only increase future practitioner's confidence in planning effective interventions, but it will also aid in decreasing the stigma that individuals with developmental disabilities face.

### *Evaluation of the Captone Project (Activity 3) and Correlation with Literature*

Creating and teaching Tune-Up™ class materials was a great opportunity for me to apply skills that I gained throughout the capstone to meet the needs of a group. I think this was a fun opportunity to create visuals and worksheets that could be accessible to people with a wide variety of abilities. What may meet the needs of one individual may be too challenging for another. The final Tune-Up™ class that I taught culminated my successes and learning opportunities throughout the capstone into one project.

One of the reasons that I believe this Tune-Up™ was successful in meeting the needs of the group was because it included several step-by-step guides to correlate with the worksheets. However, I also focused on group discussions, sharing with the group, and social engagement during this class. Research has proven that social engagement can help individuals with Down syndrome develop independence (Gameren-Oosterom et al., 2013). These classes are great opportunities for individuals with Down syndrome to increase functional independence while learning in a positive social environment.

### *Recommendations for Practice, Policy, and/or Education*

Teaching Tune-Up™ classes was a great way to essentially run group occupational therapy interventions. By teaching young adults with Down syndrome different IADLs, I was able to improve my own personal skills of group leadership, activity analysis, and adapting group interventions to meet the needs of a diverse population. It would be beneficial for occupational therapy programs to provide opportunities for students to teach classes like these. There is a great opportunity for a partnership between the DSAGC and the Xavier OTD program. Not only could this be beneficial for learning skills for group interventions, but there are opportunities for caregiver education, assistive technology support and collaborating with other professionals.

### Reflection of the Capstone

This capstone project challenged me to grow as a student, leader, and future occupational therapy practitioner. I am incredibly appreciative of the learning opportunities that my capstone mentor and the DSAGC provided for me. I was welcomed wholeheartedly into DSAGC, which helped me seek out new projects and find ways to bring an occupational therapy perspective to this non-profit organization. I was able to apply my knowledge to different groups and projects that served individuals across the lifespan. This included helping to create “Play with a Purpose” groups for children ages 0-5, helping individuals feel more prepared and included in the Buddy Walk, as well as my involvement with the Find Your Way™ program.

It is difficult to put into words my appreciation of the Find Your Way™ program. Seeing and being part of the work that goes into running these retreats and classes provided me with a whole new perspective on this organization. I have always been passionate about working with individuals with Down syndrome, and the Find Your Way™ program tied together this passion with occupational therapy. I am inspired to continue applying what I have learned in my capstone experience into my career as an occupational therapist. I have made connections at the DSAGC that I will cherish, and I am motivated to continue partnering with the DSAGC in the future.





## Appendix A: Literature Table

Article	Research Design	Participants	Data Collection	Tools/instruments	Results	Limitations	Comments
Gameren-Oosterom, H., Fekkes, M., Reijneveld, S., Oudesluys-Murphy, A., Verkerk, P., Wouwe, J., & Buitendijk, S. (2013). Practical and social skills of 16-19-year-olds with Down Syndrome: Independence still far away. <i>Research In Developmental Disabilities</i> , 34(12). <a href="https://doi.org/10.1016/j.ridd.2013.09.041">https://doi.org/10.1016/j.ridd.2013.09.041</a>	Cross sectional data – Level 3	513 children who were registered by the Dutch Down Syndrome foundation who were born in 1992-1994	Questionnaires	Dutch Social competence rating scale and Children's Social Behavior Questionnaire	Adolescents with Down syndrome have limited practical and social skills that are needed for independent functioning	Selection bias might be present, sample might be an underrepresentation of the problems people with DS have	People with Down syndrome need assistance on practical and social skills before they can function independently
Golisz, K., Waldman-Levi, A., Swierat, R., & Toglia, J. (2018). Adults with intellectual disabilities: Case studies using everyday technology to support daily living skills. <i>British Journal of Occupational Therapy</i> , 81(9),	Level 2: Case study design with double baseline phase	3 adult men, aged 32, 33, and 55 with IDD	Interview, performance-based observations, two baselines, intervention, and post-interventions	Modified COPM, The Behavior Rating Inventory of Executive Function-Adult	All participants functional performance of ADL tasks improved in accuracy and efficiency as cues faded,	Does not follow a rigorous single-subject design with multiple probes, does not explore participants' knowledge of technology and	Discusses personalized AT, provides continued support after instruction for people with IDD

<a href="https://doi.org/10.1177/0308022618764781">https://doi.org/10.1177/0308022618764781</a>					technology provided support for ongoing independence	proficiency in basic functions	
Janson, A., Moen, A., & Aure, C. (2020). Introducing a nutritional app in supervised residences for independent living: Experiences of individuals with intellectual disabilities and their caregivers. <i>Journal of Applied Research in Intellectual Disabilities</i> , 34(1). <a href="https://doi.org/10.1111/jar.12784">https://doi.org/10.1111/jar.12784</a>	Explorative design using qualitative methods – Level 3	5 adults with intellectual disabilities, ages 29-62	Dyad interviews with participants and caregivers, focus group interviews with caregivers	Data points recorded using a recording device and transcribed using HyperTRANSCRIBE version 1.6	Study found behavioral change and making good food choices for people, APPetitus used in supervised, independent residences	Power relations because caregivers contributed to study, nobody on research team had extensive experience of working with people with IDD	An app could be a successful intervention for enforcing independence for people with IDD
Varshney, K., Iriowen, R., Morrell, K., Pillay, P., Fossi, A., & Stephens, M. (2022). Disparities and outcomes of patients living with Down Syndrome undergoing healthcare transitions from pediatric to adult care: A scoping review.	Scoping review – level 2	3 articles included in the review	Identification of studies via databases and registers	The tool used was a PRISMA-ScR study selection flow diagram for organization of studies	People with Down syndrome have higher risk factors, comorbidities, and other health conditions.	A small number of studies were eligible, leading to limitations in drawing conclusions. All studies were quantitative	Individuals with Down syndrome tend to have incomplete transitions to adult care, most receive no transitional planning.

<i>American Journal of Medical Genetics, Part A</i> , 188(8), 2293-2302. <a href="https://doi.org/10.1002/%2Fajmg.a.62854">https://doi.org/10.1002/%2Fajmg.a.62854</a>					They also have decreased transitional care.	studies in the US, might not be generalizable.	
Krasniqi, V., Zdravkova, K., & Dalipi, F. (2022). Impact of assistive technologies to inclusive education and independent life of Down Syndrome persons: A systematic literature review and research agenda. <i>Sustainability</i> , 14(8). <a href="https://doi.org/10.3390/su14084630">https://doi.org/10.3390/su14084630</a>	Systematic review: level 1	24 studies with AT, inclusiveness, and life skills for individuals with Down syndrome/IDD	Thematic analysis was used to establish patterns across the literature	JabRef citation and reference management software following the PRISMA approach	If technology is appropriately used and equipped with features, it can be an ally for people with Down Syndrome to live independently. Most of these can be used for any person with IDD.	Potentially missed other beneficial sources, did not include articles published before 2015, only used peer-reviewed journals	Using technology for people with IDD is promising, if it is personalized and properly designed, it can be used for people with Down Syndrome in a wide variety of settings
Maich, K., Rutherford, C., & Bishop, C. (2019). Phones, watches, and apps: Engaging everyday mobile assistive technology for adults with intellectual and/or	Mixed methods pilot project developed in an embedded	10 people with intellectual and/or developmental disabilities and 5 front-	Qualitative data from post-intervention focus groups and quantitative observation	Dedose software (SOcioCultural Research Consultants, StopWatch Deluze app	Initial levels of insight related to the purpose and specific research	Small sample size, could use an alternate method of recording app usage data that	Similar to Ipad, programs using phones and watches can help people feel more



developmental disabilities. <i>Exceptionality Education International</i> , 29(1), 116-135.	design – Level 3	line coordinators	al data on duration of supports while engaging in ADLs and IADLs		question. It does show a higher level of engagement that is not statistically significant, but they demonstrated independence and motivation/increased opportunity	successfully differentiates between how long an app is open and how long it is in active use	independent and successful at ADLs and IADLs
Morse, K., Dukes, C., Brady, M., Frain, M., & Duffy, M. (2021). Using an Ipad job coaching intervention to enhance food preparation skills for individuals with developmental disabilities. <i>Journal of Vocational Rehabilitation</i> , 55, 235-249. <a href="http://dx.doi.org/10.3233/jvr-211160">http://dx.doi.org/10.3233/jvr-211160</a>	Two-experiment study, multiple baseline design – Level 3	Four individuals in Study 1 with IDD, 3 participants in study 2 with IDD	Observation (collected simultaneously by 2 observers during experimental conditions)	Post hoc analysis with Percent of Non-Overlapping Data (PND)	All in study 1 and study 2 made dramatic improvements in accuracy of their task performance.	Does not include participants perception of the social validity of the device and app, variability in how participants accessed the instructions on iPads	iPads might be a beneficial technology to use to teach people ADL skills and create a program based off of this concept

Peters, V., Bok, L., Beer, L., Rooij, J., Meijboom, B., & Bunt, J. (2022). Destination unknown: Parents and healthcare professionals' perspectives on transition from paediatric to adult care in Down syndrome. <i>Journal of Applied Research in Intellectual Disabilities</i> , 35(5), 1208-1216. <a href="https://doi.org.xavier.idm.oclc.org/10.1111/jar.13015">https://doi.org.xavier.idm.oclc.org/10.1111/jar.13015</a>	Qualitative study with semi-structured interviews – Level 3	20 parents of children with Down syndrome and 6 healthcare professionals	Semi-structured interviews	Interviews were recorded and a thematic analysis of the content was carried out	Continuity of care was highlighted as essential, early preparation is needed for transition	Unknown if the findings are generalizable outside of the Netherlands, parents came from the same region, all healthcare workers had experience with people with Down syndrome	To best meet needs of individuals with Down syndrome and help them transition, they must be active in transition between healthcare professionals
Resta, E., Brunone, L., D'Amico, F., & Desideri, L. (2021). Evaluating a low-cost technology to enable people with intellectual disability of psychiatric disorders to initiate and perform functional daily activities. <i>International Journal of Environmental Research and Public Health</i> , 18(18). <a href="https://doi.org/10.3390/ijerph18189659">https://doi.org/10.3390/ijerph18189659</a>	Level 3: Non-concurrent multiple baseline design across 2 groups	14 participants ages 25-62. Group 1: psychiatric conditions, Group 2: intellectual disability	Baseline and intervention daily percentage of activities started correctly, carried out correctly,	Samsung Galaxy A3 smartphone with Android 9 Operating System, Kolmogorov-Smirnov test	Positive impact of intervention in enabling participants to initiate and perform functional activities, increase to over 90% after intervention, statistically	Heterogeneity of health conditions may be a confounding variable, discrepancy between high percentage of activities starting independently and low frequency percentage calls for refinement, no	Shows that using smart phones as a program for initiating ADLs is beneficial for people with IDD

					significant for all participants in group 2	direct assessment of their moods was done	
Santoro, S., Hendrix, J., White, N., & Chandan, P. (2022). Caregivers evaluate independence in individuals with Down syndrome. <i>American Journal of Medical Genetics Part A</i> , 188(55), 1526-1537. <a href="https://doi.org/10.1002/ajmg.a.62680">https://doi.org/10.1002/ajmg.a.62680</a>	Prospective questionnaire of caregivers of individuals with Down syndrome – level 4	408 caregivers of people with Down syndrome	Questionnaire on 6 topics	Means compared through an ANOVA, questionnaire evaluated with means, SD	No single task on the questionnaire was able to be completed by all participants , emphasizes that data isn't necessarily generalizable for all people with DS. Safety, communication, self-care, daily living skills, and social and leisure skills, and sexual abuse were the biggest categories	Limitations of electronic survey, unable to confirm if everyone was actually a caregiver of someone with DS, most people were from the same background (white, middle class)	Caregivers understanding of independence relies on 6 categories from this study, so it is important to know about safety, communication, vocational topics, and self-care

Xu, L., Fields, N., Greer, J., Tamplain, P., Bricout, J., Sharma, B., & Doeling, K. (2022). Socially assistive robotics and older family caregivers of young adults with intellectual and developmental disabilities (IDD): A pilot study exploring respite, acceptance, and usefulness. <i>PLoS ONE</i> , 17(9). <a href="https://doi.org/10.1371/journal.pone.0273479">https://doi.org/10.1371/journal.pone.0273479</a>	Mixed methods experimental design with 3 phases – Level 3	11 young adults with IDD and caregiver dyads	Quantitative data using survey in Phase II program, qualitative through interviews	Godspeed Questionnaire Series for human robot interaction, The Short Form Zarit Burden Interview for wellbeing outcome of older caregivers, QoL	Favorable scores of the social presence of the robot, burden of stress didn't improve significantly	Small sample size, quality of life and caregiver stress might not have been the best test for the intervention	Robots might not be the best method to relieve caregiver stress/burden, but the social interaction led to positive outcomes for these individuals, describes caregiver opinions and feelings well
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Articles in Lit Review that are not studies:

Kazemi, M., Salehi, M., & Kheirollahi, M. (2016). Down Syndrome: Current status, challenges, and future perspectives. *International Journal of Molecular and Cellular Medicine*, 5(3), 125-133.

MacLennan, S. (2019). Down's syndrome. *Sage Journals*, 13(1). <https://doi.org/10.1177/1755738019886612>

## Appendix B: Scoping Review

### Needs Assessment

#### **Purpose of Needs Assessment**

A needs assessment is being conducted to help occupational therapists understand and prioritize the needs of young adults with Down syndrome and their caregivers for obtaining independent living skills. Information being sought includes the current research levels and strengths of individuals with Down syndrome for reaching functional independence. It is also essential to understand anything that may inhibit individuals with Down syndrome from reaching functional independence in desired occupations, and how these can be combated to support development. Information from this needs assessment will be used to support the development of a project aimed at improving independent living skills for young adults with Down syndrome, and how caregivers can help facilitate these skills.

#### **Stakeholders**

Stakeholders include the Down Syndrome Association of Greater Cincinnati (DSAGC), such as the staff at the DSAGC, individuals with Down syndrome, and their caregivers who are interested in independent living skills. Stakeholders also include occupational therapy students and faculty at Xavier University implementing this project.

#### **Methodology**

Information for the needs assessment was obtained after a literature search was completed on current functional independence skills in adults with Down syndrome, assistive technology available to facilitate independent living, and caregiver burden and needs. Sources used include a variety of peer-reviewed journal articles from Xavier University's databases. These sources were selected after reviewing their title, keywords, and abstract. Articles included are from 2013-2023. However, a statement from the American Occupational Therapy Association from 1993 is also included in this analysis. These sources were selected because they provided great information on programs already established for individuals with Down syndrome and intellectual and developmental disabilities, how occupational therapy can assist them, and what skills are needed to live independently.

#### **SWOT Analysis**

##### **Strengths**

- An objective of occupational therapy is to teach individuals how to use their skills to become more independent and achieve desired functional skills (AOTA, 1993).
- Independent living skills are within occupational therapy's scope of practice, which allows for adequate research and information to support this project (AOTA, 1993).
- Teaching independent living skills can alleviate caregiver burden complications, such as mental and physical health problems (Chambers & Chambers, 2015; Xu et al., 2022).
- Assistive technology has been proven to aid in the development of functional skills, such as meal preparation, medication management, and general ADLs (Janson et al., 2020; Maich et al., 2019; Morse et al., 2021; Resta et al., 2021).

### **Weaknesses**

- The push for independent living for individuals with developmental disabilities is still a somewhat new area of practice (Kapusta, 2021).
- There is not extensive research on smart homes and other developing assistive technology for independent or group living (Landuran et al., 2022).
- There is not enough transitional care planning involved between pediatric and adult healthcare professionals (Peters et al., 2022; Varshney et al., 2022).
- Adults with moderate intellectual and developmental disabilities are an understudied population (Golisz, 2018).

### **Opportunity**

- This project can challenge occupational therapists, individuals with Down syndrome, and their caregivers to think creatively about how to personalize the development of independent living skills (Santoro et al., 2022).
- DSAGC enrichment classes focus on increasing knowledge on topics or improving specific skills (DSAGC, 2014).
- DSAGC young adult coordinator provides consultation on housing, transportation, and healthcare (DSAGC, 2014).
- Current labor shortages and technology advances encourage the use of assistive technology to solve independent living challenges (DODD).
- Assistive technology in smart homes increases independent living skills and becoming active in the community (Kapusta, 2021).

### **Threat**

- The access to resources that individuals with Down syndrome and their caregivers have (Xu et al., 2022).
- Proper education on intellectual and developmental disabilities and independent living (Peters et al., 2022).
- Each person develops differently and may have opposing viewpoints on levels of independence, needs, and measures for performing functional activities independently (Santoro et al., 2022).
- Caregivers may be hesitant to allow their child with intellectual or developmental disabilities to live independently (Xu et al., 2022).

### **Conclusion**

After completing the SWOT, it is evident that a capstone project can be beneficial to address the functional independence needs of adults with Down syndrome to facilitate independent living. Occupational therapy practitioners are skilled in creating individualized goals for individuals to meet their needs for independent living. With there being a rise of smart homes and assistive technology used in communities to allow individuals with disabilities to live independently, now is an adequate time to implement a program on independent living. Moving forward, it is necessary to further investigate the programs the DSAGC offers to facilitate independent living skills and determine where training programs can be implemented. This plan will require interviews with staff at the DSAGC to understand current programming and goals for future programs. To make this project successful, there must be understanding of resources, knowledge, and current training being done to encourage independent living.

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## Appendix C: IRB Application

Complete IRB Application is linked in OneDrive folder.

## Appendix E: Capstone Goals and Objectives for a Capstone Project Table and a Capstone Experience Table

### **PART 1: Project Outcomes (Goals and Activities)**

Provide a brief description of the project (or components of the project). Please be brief. Use of bullet points is encouraged.

- Pre-post survey for success of Find Your Way program in increasing independence (Find Your Way is a program already run by DSAGC)
- Interviews with individuals and their caregivers to determine what needs still need to be met for more independence and eventual transition to independent living
- Potential addition of skill acquisition classes, parent education classes, or basic AT classes for increased independence opportunities

Goal#	Project Goal	Activities	Proposed Timeline for Meeting Goal	Proposed Evidence of Achievement
1	Student will create and administer a caregiver survey to measure levels of functional independence before and after completing Find Your Way program.	<ol style="list-style-type: none"> <li>1. Student will review RTI assessment and scoring guidelines, potentially using this as survey once converted into Qualtrics</li> <li>2. Student will complete a draft survey for FM &amp; SM review</li> <li>3. Student will submit for IRB approval</li> </ol>	<ul style="list-style-type: none"> <li>• Create survey by 12/6/24</li> <li>• Send survey to FM &amp; SM by 12/9/25</li> <li>• IRB submission Spring 2025</li> </ul>	IRB approval of Qualtrics survey
2	Student will determine 2 ADLs or IADLs that individuals with Down syndrome /their caregivers report they need more training in.	<ol style="list-style-type: none"> <li>1. Student will review literature of at least 2 articles that discuss current needs of individuals with IDD for independent living</li> <li>2. Student will create semi-structured interview guide to use with young adults with Down syndrome and their caregivers</li> <li>3. Student will submit to IRB for approval</li> </ol>	<ul style="list-style-type: none"> <li>• Review articles by 10/25/24</li> <li>• Send semi-structured interview guide to FM and SM by 12/6/24</li> <li>• IRB submission by Spring 2025</li> </ul>	IRB approval of semi-structured interviews
3	Student will create and run skill acquisition classes for young adults with Down syndrome or caregiver education classes based on independent living needs.	<ol style="list-style-type: none"> <li>1. Student will review DSAGC classes currently being offered for skill building/ tune up with capstone site mentor</li> <li>2. Student will research and review at least 3 articles on everyday</li> </ol>	<ul style="list-style-type: none"> <li>• Review classes by Spring 2025.</li> <li>• Review articles by Spring 2025.</li> </ul>	Draft of class schedule and topic areas.

		assistive technology and most prevalent needs of individuals with Down syndrome		
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## PART 2: Learning Objectives (Goals and Activities)

Goal#	Learning Goal	Activities to Achieve Goal	Proposed Timeline for Meeting Goal	Proposed Evidence of achieving Learning Goal
1	<b>Practice:</b> Demonstrate effective communication skills and work interprofessionally with those who receive and provide care/services.	<ol style="list-style-type: none"> <li>1. Co-lead or lead skill acquisition/tune up classes on IADL skills</li> <li>2. Communicate effectively in interviews with caregivers and clients to understand independent living skills and needs</li> </ol>	<ol style="list-style-type: none"> <li>1. 8/25/25</li> <li>2. Continuous depending on interview dates</li> </ol>	<ol style="list-style-type: none"> <li>1. Caregiver/client pre-post tests</li> <li>2. Field notes and feedback from caregivers and clients</li> </ol>
2	<b>Ethics:</b> Display positive interpersonal skills and insight into one's professional behaviors to accurately appraise one's professional disposition strengths and areas for improvement.	<ol style="list-style-type: none"> <li>1. Attend and/or participate in an interprofessional DSAGC meeting, such as for the Buddy Walk or Find Your Way</li> <li>2. Schedule a time to meet with capstone site mentor halfway through capstone to review strengths and areas for improvement in programming</li> </ol>	<ol style="list-style-type: none"> <li>1. 9/1/25</li> <li>2. 10/13/25</li> </ol>	<ol style="list-style-type: none"> <li>1. Notes from meeting and reflective narrative</li> <li>2. Midterm Evaluation</li> </ol>
3	<b>Advocacy:</b> Exhibit the ability to practice educative roles for consumers, peers, students, interprofessionals and others.	<ol style="list-style-type: none"> <li>1. Hold an informational session on everyday assistive technology for IADL participation, including meal prep, community participation, and creating a routine/schedule</li> <li>2. Schedule a meeting to discuss latest occupational therapy practice guidelines for adults with IDD with capstone site mentor and compare them to her physical therapy practice guidelines</li> <li>3. Contact representative at LADD to come to an informational session to</li> </ol>	<ol style="list-style-type: none"> <li>1. 10/6/25</li> <li>2. 9/1/25</li> <li>3. 9/15/25</li> </ol>	<ol style="list-style-type: none"> <li>1. Handout</li> <li>2. Meeting notes and reflective summary</li> <li>3. Notes from communication</li> </ol>

		discuss current independent living options		
4	<b>Leadership:</b> Develop essential knowledge and skills to contribute to the advancement of occupational therapy through scholarly activities.	<ol style="list-style-type: none"> <li>1. Lead a group of young adults with Down syndrome in activities during a Find Your Way program retreat</li> <li>2. Co-lead a meeting discussing progress and goals for upcoming Find Your Way retreats</li> </ol>	<ol style="list-style-type: none"> <li>1. 11/21/25</li> <li>2. 9/29/25</li> </ol>	<ol style="list-style-type: none"> <li>1. Feedback from site mentor on group</li> <li>2. Feedback from site mentor and notes from meeting</li> </ol>
5	<b>Scholarship:</b> Apply a critical foundation of evidence based professional knowledge, skills, and attitudes.	<ol style="list-style-type: none"> <li>1. Find at least 3 recent EBP articles for independent living and educate caregivers/clients on the findings from the articles</li> <li>2. Incorporate findings from recent research articles into Find Your Way programs, including "Cruise" and "Navigate"</li> </ol>	<ol style="list-style-type: none"> <li>1. 8/25/25</li> <li>2. 11/21/25</li> </ol>	<ol style="list-style-type: none"> <li>1. Downloaded articles in capstone folder, summarized important findings</li> <li>2. Site EBP in program creation</li> </ol>
6	<b>Individual Student Learning Goal:</b> Increase problem solving skills and critical thinking to adjust to changes in scheduling, sudden problems, or cancellations from clients	<ol style="list-style-type: none"> <li>1. Create a weekly schedule for goals, proposed activities, and scheduled interviews or meetings with clients to remain organized</li> <li>2. Create a backup activity for a Find Your Way programming activity if clients are not interested or benefitting from originally planned activity</li> </ol>	<ol style="list-style-type: none"> <li>1. Weekly</li> <li>2. 9/22/25</li> </ol>	<ol style="list-style-type: none"> <li>1. Running log of weekly schedules in designated capstone calendar</li> <li>2. Backup activity documented in capstone folder</li> </ol>
7	<b>Individual Student Learning Goal:</b> Increase clinical knowledge of providing occupation-based	<ol style="list-style-type: none"> <li>1. Contact an occupational therapist from previous Cincinnati Children's Level II Fieldwork to discuss</li> </ol>	<ol style="list-style-type: none"> <li>1. 9/22/25</li> <li>2. Goal to be met as</li> </ol>	<ol style="list-style-type: none"> <li>1. Notes from meeting with OT and goals</li> </ol>



	interventions for individuals with intellectual and developmental disabilities	incorporating OT interventions into a program without distinct OT 2. Observe other programs at the DSAGC for other age groups, including children and older adults	much as schedule allows, but will to be achieved initially during first 2 weeks	for moving forward 2. Handouts from programs outside of Find Your Way program
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## Appendix F: Signed Memorandum of Understanding



### Occupational Therapy Doctoral Capstone Memorandum of Understanding

Capstone Student Name Maggie Sullivan	Capstone Site Mentor Name Stephanie Dailey
Email Address Sullivanm30@xavier.edu	Title/Position Young Adult Coordinator
Phone Number (513)635-2293	Email Address stephanied@dsagc.com
Address 6899 Maddox Drive, Cincinnati OH, 45230	Phone Number (513)-761-5400 ext. 219
<b>Site Information</b>	
Name Down Syndrome Association of Greater Cincinnati	Alternate Contact Name/ Position Beth Smith
Phone Number (513)-761-5400	Phone Number (513)-761-5400 ext. 201
Address 4623 Wesley Ave, Suite A	Email Address beths@dsagc.com

Memorandum of Understanding (MOU), effective **August 2025 – December 2025** by and between above named doctoral student, Capstone Site, Capstone Site Mentor, and the Department of Occupational Therapy at Xavier University. The following lists the individualized Learning Objectives for Maggie Sullivan, the Mentoring Plan, and the Responsibilities of all Parties involved.

#### Learning Objectives

##### XU Doctoral Capstone Learning Objectives

1. **Practice:** Demonstrate effective communication skills and work interprofessionally with those who receive and provide care/services.
2. **Ethics:** Display positive interpersonal skills and insight into one's professional behaviors to accurately appraise one's professional disposition strengths and areas for improvement.
3. **Advocacy:** Exhibit the ability to practice educative roles for consumers, peers, students, interprofessionals and others.
4. **Leadership:** Develop essential knowledge and skills to contribute to the advancement of occupational therapy through scholarly activities.
5. **Scholarship:** Apply a critical foundation of evidence based professional knowledge, skills, and attitudes.

##### Individualized Student-Centered Learning Objectives

1. Increase problem solving skills and critical thinking to adjust to changes in scheduling, sudden problems, or cancellations from clients



2. Increase clinical knowledge of providing occupation-based interventions for individuals with intellectual and developmental disabilities

### **Project Outcomes**

1. Student will create and administer a caregiver survey to measure levels of functional independence before and after completing Find Your Way program.
2. Student will determine 2 ADLs or IADLs that individuals with Down syndrome /their caregivers report they need more training in.
3. Student will help create and run skill acquisition/tune-up classes for young adults with Down syndrome or caregiver education classes based on independent living needs.

### **Plans for Mentoring**

Capstone student and Site Mentor plan to meet at the Down Syndrome Association of Greater Cincinnati (LOCATION) weekly (FREQUENCY). Student will maintain a detailed record of all mentoring meetings.

### **Responsibilities of All Parties**

#### ***Student is Responsible for:***

1. Working collaboratively with the Doctoral Capstone Coordinator, Site, and Faculty Mentor to create specific learning objectives for the doctoral capstone experience.
2. Working collaboratively with the Doctoral Capstone Coordinator, Site, and Faculty Mentor to create specific project outcomes for the doctoral capstone project.
3. Adhering to all policies and procedures of the facility unless exempted, including prompt notification of student absences.
4. Fulfilling all duties and assignments as specified by the Capstone Site Mentor, unless exempted, within the time limit specified.
5. Completing 14 weeks of full-time doctoral experience. Absences must be made up to ensure 14 weeks of full-time doctoral experience.
6. Evaluating the Capstone Site Mentor and Capstone Site to help continue to improve educational outcomes.
7. Writing a letter of appreciation to the Site Supervisor and the Capstone Site Mentor for the educational opportunities offered to the student.
8. Comply with all policies, procedures, and requirements in the *Xavier University Occupational Therapy Doctoral Capstone Manual*.

#### ***Capstone Faculty Mentor is Responsible for:***

1. Advising the student on possible practice settings for the doctoral experience.
2. Mentoring the student in reviewing evidence, assessments, and interventions relevant to the selected doctoral experience area.
3. Making periodic contact with the student.



**Capstone Coordinator is Responsible for:**

1. Ensure that a signed MOU is in place for the capstone site, focusing on a student's topic of interest.
2. Mentoring and orienting students to the general purposes of the doctoral experience and project and providing them with needed forms.
3. Making periodic contact with the student as needed.
4. If necessary, develop and implement a policy for withdrawing students from a doctoral experience.
5. Reassigning students who are not successful in the doctoral experience in accordance with policies and procedures in the *Xavier University Occupational Therapy Doctoral Capstone Manual*.

**Capstone Site Mentor is Responsible for:**

1. Collaborating with the student and Doctoral Capstone Coordinator in the development of the doctoral experience learning objectives that provide opportunities for the practical implementation of theoretical concepts offered previously during the Occupational Therapy Doctoral program at Xavier University.
2. Evaluating each student at the midpoint and conclusion of the doctoral experience using the Learning Objectives and Project Outcomes listed above. The Site Mentor will be provided with the evaluation form.
3. Collaborating with the student, Xavier University Capstone Coordinator, and Institution to ensure success and address concerns as they arise.
4. Being familiar with the policy regarding the "withdrawal of students from doctoral experience" for Xavier University.
5. Providing student mentoring meetings as outlined and additional as indicated.

**Ownership of Work Product**

☐ Materials developed for the site (i.e. handouts, program protocols) by the student are exclusively the property of the site.

OR

☒ Materials for developed for the site (i.e. handouts, program protocols) by the student are co-owned by the capstone student and Capstone Site and therefore can be used by both parties in the future without additional consent.

**Authorship**

☒ Authorship Not Applicable

☐ Memorandum of Understanding Addendum A



By signing the agreement, all parties agree to the provisions above.

Maggie Sullivan 12/2/24  
Student Date

Marnie Renda OTD, OTR/L 11/27/24  
Doctoral Capstone Coordinator Date

Heather D. ... OTD, OTR/L 11/29/2024  
Capstone Faculty Mentor Date

Stephanie Bailey 12/2/24  
Capstone Site Date

## Appendix G: IRB Letter of Response

October 1, 2025  
Maggie Sullivan  
Xavier University

Dear Ms. Sullivan:

The IRB has completed the review of your protocol #25-026, *Empowering Adulthood: Enhancing Independent Living Skills in Young Adults with Down Syndrome*.

The IRB has completed the review of your protocol # and title. using expedited review procedures. We appreciate your thorough treatment of the issues raised and your timely response. Your research activities present no more than minimal risk and involve procedures in category 7 of the list of research activities that may be reviewed using Expedited procedures authorized by 45 CFR 46.110.

**Approval expires September 30, 2026.** A progress report, available on our [website](#), is due by that date. If the IRB has not received a progress report from you before MIDNIGHT on the study's expiration date, we will AUTOMATICALLY set your study's status to "Closed". **No further data collection is allowed at that point, and if you wish to re-commence data collection, you will be required to submit a new application, along with all relevant materials, to our office.**

It is **your responsibility** as the researcher to ensure that your progress report and any request for an extension of data collection is submitted to our office before your approval expires. Any proposed changes to the protocol must be reviewed by the IRB before implementation, unless the change is specifically necessary to eliminate immediate threats to participants' health and/or wellbeing. You are responsible for adhering to the policies and guidelines set forth by Xavier University's IRB, which include but are not limited to maintaining proper documentation of study records and promptly reporting to the IRB any adverse events. If you have any questions, please contact the IRB office at 745-2870. We wish you success with your research!

Sincerely,  
*Morrie Mullins, PhD.*  
Morrie Mullins, PhD.  
Interim Chair, Institutional Review Board

Xavier University

## Appendix H: Week-by-Week Project Plan

### Capstone Week-by-Week Plan

P= Project Goal

L= Learning Goal

Week	Activities	Related Goal	Progress/Status at end of week
1 8/18	Orientation/Observation <ul style="list-style-type: none"> <li>Observe variety of programs at DSAGC, seeing what is offered for each age group</li> <li>Attend meetings</li> <li>Conduct personal background research</li> </ul>	L6.1 L7.2 L2.1 P1.1 P3.1 P2.1	
2 8/25	Orientation/Observation <ul style="list-style-type: none"> <li>Attend meetings at DSAGC</li> <li>Conduct personal background research – 3+ articles</li> <li>Send Pre RTI survey &amp; reminders</li> </ul>	L6.1 P3.1 L2.1 L5.1 P3.2	
3 9/1	Orientation/Observation <ul style="list-style-type: none"> <li>Buddy Walk Preparation – learn about advocating for Find Your Way program at Buddy Walk if needed, see how I can work with Buddy Walk</li> </ul> Project Preparation <ul style="list-style-type: none"> <li>Send Pre RTI Survey &amp; reminders</li> </ul>	L6.1 L2.1 P1.2	
4 9/8	Project Preparation <ul style="list-style-type: none"> <li>Pre RTI survey &amp; reminders</li> <li>Buddy Walk Preparation, providing help and integrating into project as fit</li> </ul>	L6.1 P2.2 L3.3	
5 9/15	Project Preparation <ul style="list-style-type: none"> <li>Create backup occupation-based activities for Find Your Way</li> <li>Discuss OT interventions for IDD with previous Level II FWE</li> </ul>	L6.1 L6.2 L7.1	

6 9/22	Project Implementation <ul style="list-style-type: none"> <li>• Preparation for Cruise Retreat (happens at end of this week?)</li> <li>• Meetings about Cruise Retreat</li> </ul>	L6.1 L5.2 L4.2	
7 9/29	Project Implementation <ul style="list-style-type: none"> <li>• Post interviews from Cruise Retreat</li> <li>• Post RTI survey</li> <li>• Informational session on assistive technology and independent living options</li> </ul>	L6.1 P1.2	
8 10/6	Project Implementation <ul style="list-style-type: none"> <li>• Post interviews from Cruise Retreat</li> <li>• Post RTI survey</li> <li>• Halfway checkpoint – talk with site mentor about progress, goals, and areas to improve</li> </ul>	L6.1 L2.2 P1.2	
9 10/13	Project Implementation <ul style="list-style-type: none"> <li>• Tune Up Class or Parent Education Class</li> <li>• Pre RTI survey for Navigate retreat participants</li> </ul>	L6.1 L1.1 P3	
10 10/20	Project Implementation <ul style="list-style-type: none"> <li>• Pre interviews for Navigate Weekend Retreat</li> <li>• Pre RTI Survey for Navigate retreat participants</li> </ul>	L6.1 P2 P1.2	
11 10/27	Project Implementation <ul style="list-style-type: none"> <li>• Pre interviews for Navigate Weekend Retreat</li> <li>• Pre RTI Survey for Navigate retreat participants</li> </ul>	L6.1 P2 P1.2	
12 11/3	Project Implementation <ul style="list-style-type: none"> <li>• Preparation for Navigate Weekend Retreat (happens at end of this week)</li> <li>• Post Interviews</li> <li>• Post RTI survey</li> <li>• Tune Up Class</li> </ul>	L6.1 L1.1 P3 P1.2 L5.2	
13 11/10	Data Analysis/ Results <ul style="list-style-type: none"> <li>• Finalize Post RTI survey and Interviews for Navigate retreat</li> <li>• Analyze the data</li> <li>• Create themes for interviews</li> </ul>	L6.1	



	<ul style="list-style-type: none"> <li>Pre-post analysis</li> </ul>		
14 11/17	Data Analysis/ Results /Discussion <ul style="list-style-type: none"> <li>Analyze the data</li> <li>Begin making poster for capstone symposium</li> </ul>	L6.1	
15 11/24	Dissemination <ul style="list-style-type: none"> <li>Put in repository</li> <li>Create a poster for capstone symposium (10-15 min presentation)</li> </ul> Video <ul style="list-style-type: none"> <li>3-minute video describing capstone project</li> </ul>	L6.1	
16 12/1	Dissemination <ul style="list-style-type: none"> <li>Pinning ceremony</li> <li>Final edits to presentation</li> </ul> Capstone Symposium <ul style="list-style-type: none"> <li>Present at symposium</li> </ul>	L6.1	

## Appendix I: Guide to Independent Living

Link to Guide to Independent Living:

[https://www.canva.com/design/DAG2jNJwosQ/AlmwKVmj6YZh9umAYfBjIQ/view?utm\\_content=DAG2jNJwosQ&utm\\_campaign=designshare&utm\\_medium=link2&utm\\_source=uniquelinks&utlId=h103653123b](https://www.canva.com/design/DAG2jNJwosQ/AlmwKVmj6YZh9umAYfBjIQ/view?utm_content=DAG2jNJwosQ&utm_campaign=designshare&utm_medium=link2&utm_source=uniquelinks&utlId=h103653123b)

## Appendix J: Capstone References

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