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### BOSTON UNIVERSITY

# SARGENT COLLEGE OF HEALTH AND REHABILITATION SCIENCES

**Doctoral Project** 

# COLLEGE ACCESS MAXIMIZING PARTICIPATION FOR US (CAMPUS)

by

### SHARON EILEEN McGRATH

B.S., University of New England, 1989 M.Ed., Lesley University, 2003

Submitted in partial fulfillment of the

requirements for the degree of

Doctor of Occupational Therapy

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Academic Mentor

Karen Jacobs, Ed.D., OT, OTR, CPE, FAOTA Associate Dean for Digital Learning & Innovation Clinical Professor of Occupational Therapy

Academic Advisor

Karen Jacobs, Ed.D., OT, OTR, CPE, FAOTA Associate Dean for Digital Learning & Innovation Clinical Professor of Occupational Therapy

# DEDICATION

I dedicate this work to my parents, Mary and William McGrath.

I miss you both every day.

### ACKNOWLEDGMENTS

I would like to express my deepest gratitude and respect to my academic mentor and advisor, Dr. Karen Jacobs, for her support and unending patience through this journey.

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### **COLLEGE ACCESS MAXIMIZING PARTICIPATION FOR US**

### (CAMPUS)

### SHARON EILEEN McGRATH

Boston University, Sargent College of Health and Rehabilitation Sciences, 2021

Major Professor: Karen Jacobs, Ed.D., OT, OTR, CPE, FAOTA, Associate Dean for Digital Learning & Innovation, Clinical Professor of Occupational Therapy

### ABSTRACT

Postsecondary programs for students with intellectual disabilities or neurological and autism spectrum disorders require access to vocational training, continuing education, independent living opportunities, and community participation as defined by the Individuals with Disabilities Act of 2004 (U.S. Department of Education, 2020). According to the Massachusetts Department of Elementary and Secondary Education (2020), students identified through an individual education plan are entitled to receive special education services until their 22nd birthday. Because many postsecondary or transitional programs are offered to these students on high-school campuses, these students often remain at their high schools for 6 years, or until they turn 22 years old. New and creative programming is needed to successfully transition life-skills students into adulthood. Occupational therapy practitioners can play a key role in creating and assessing transition goals and objectives. The goal outcome of the College Access Maximizing Participation for Us (CAMPUS) program is to establish a relationship with an occupational therapy (OT) department at a local community college or university for use of their OT laboratory and academic classroom. In this way, the postsecondary

students would gain access to facilities that include a kitchen, laundry, and bedroom space. The collaboration would also create Level I fieldwork placements for OT students because the postsecondary program is run by a school-based occupational therapist. Further, developing a postsecondary program on a college campus allows postsecondary students to interact with age-appropriate peers and work on valuable and meaningful occupations in an adult learning environment.

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# LIST OF ABBREVIATIONS

ACOTEAccreditation Council for Occupational Thera	py Education
ADLsactivity of	of daily living
AOTA American Occupational Therap	y Association
ASE	cial Education
CAMPUSCollege Access Maximizing Partici	ipation for Us
DESE Department of Seconda	ary Education
DOE Department	t of Education
IADLsinstrumental activity of	of daily living
ID intellectu	al disabilities
IDEA Individuals with Disabilities I	Education Act
IEPindividual e	ducation plan
MA N	Massachusetts
MAOTMassachusetts Association of Occupati	ional Therapy
MASS Massachusetts Association of School Su	perintendents
OSERS Office of Special Education and Rehabilita	ation Services
OT occupat	tional therapy
OTPoccupational therap	y practitioner
SCT social cog	gnitive theory
TPB theory of plan	nned behavior

### **CHAPTER ONE – Introduction**

Providing a well-rounded postsecondary program for students with intellectual disabilities (ID) and neurological and autism spectrum disorders requires community access, vocational opportunities, transportation, and access to home management and meal preparation facilities. However, the existing high-school-based postsecondary program in the eastern Massachusetts school district relative to the doctoral project lacks adequate facilities to address these independent living skills. Thus, the focus of the College Access Maximizing Participation for Us (CAMPUS) program is a collaboration with an occupational therapy (OT) department at a local community college or university to expand the existing postsecondary program and obtain a suitable location on the grounds of a college campus.

A careful review of the evidence-based literature was conducted using CINAHL, PsycInfo, PubMed, and ERIC. Key terms used included transition, postsecondary, occupational therapy (OT), Level I, fieldwork, Accreditation Council for Occupational Therapy Education (ACOTE), high school, special education, intellectual disabilities, young adults, 18–22 years, vocation, work, college campus, instrumental activities of daily living (IADLs), activities of daily living, and transition planning. The defined search limits included publication within the past 10 years and in the English language.

The resulting articles were found to be relevant to health care and education, such as for social work, OT, nursing, and mental health. However, the literature was sparse regarding OT involvement in postsecondary programs or which program-location type most benefited postsecondary students. One pertinent question emerged: Can a

postsecondary life-skills program based on a college campus that has an OT-education program improve IADLs and vocational skills more effectively than one based in a high school setting?

The goal outcome of the CAMPUS program is to establish a relationship with an OT department at a local community college or university for the use of their OT laboratory and classroom. In this way, the postsecondary life-skills program participants (students) would have access to facilities that includes a kitchen, laundry, and bedroom space. The collaboration would also create Level I fieldwork placements for the OT students because the postsecondary program is run by a school-based occupational therapist. Further, the postsecondary students will have opportunities to participate in campus activities, such as sporting and theater events and art activities, by partnering with college student mentors.

Since enactment of the Individuals with Disabilities Education Act (IDEA) in 1997, postsecondary programs for special education students have been incorporated in public education (U.S. Department of Education [DOE], 2001). Today, postsecondary programs for students in life-skill transition need to incorporate vocational training, continuing education, independent living opportunities, and community participation as defined by the IDEA (2004; U.S. DOE, 2020). According to the Massachusetts Department of Secondary Education (2020), students identified through an individual education plan are entitled to receive special education services until their 22nd birthday. Many postsecondary or transitional programs are offered to these students on high-school campuses. This means that these life-skills students often remain at their high schools for 6 years, or until they turn 22 years old.

Schools that maintain their postsecondary programs on a high-school campus miss valuable opportunities and deny students access to age-appropriate peer support. As the seniors in general education classes graduate, they continue their education at institutions of higher learning or enter the workforce. Seniors in a life-skills program who completed 4 years of high school also are looking to advance their opportunities. Research has shown that students with ID have similar goals and aspirations as do their neurotypical peers (Gardner et al., 2012; Rogan et al., 2014). Over the last decade, many school districts have sought alternative programs outside of the high-school setting to deliver postsecondary services. These alternative programs include locations in community-based settings and college campuses (Moon et al., 2001). Developing a postsecondary program on a college campus allows students to interact with ageappropriate peers and to work on valuable and meaningful occupations in an adult learning environment.

In this doctoral study, the postsecondary students are 18 to 22 years old with documented ID or neurological or autism spectrum disorders. Their participation in the existing postsecondary program includes vocational training, independent living skills, and travel training using public transportation. The author of this study is an OT practitioner (OTP) and has been running the current postsecondary program for 10 years.

Prior to the model proposed in this dissertation, postsecondary students remained on the high-school campus after their senior year to continue academic classes and vocational experiences. That postsecondary program had been created at the request of

parents looking to expand transition services for their children. The original team included the school district's special education director, high-school life-skills teacher, and this author, in the role of a school-based OTP.

This education team worked with community leaders to develop the program within the city. The directors of the public library, the YMCA, and the senior center were instrumental in helping to move our program off the high-school campus and into the community. Over the years, the education staff has provided many community-service learning internships and life-skills experiences.

Today, as the program continues to grow and expand, it faces other challenges. One of the biggest obstacles is the program's lack of a home base. Not having a permanent location creates an inability to provide home-life experiences such as cooking and homemaking. For example, because the current program does not have an available stove, microwave, or refrigerator, the students—many of whom do not have even basic cooking or meal preparation skills—must simulate cooking activities by making cold sandwiches and salads for lunch rather than make anything more elaborate. The program operates from the public library located in the downtown area as a classroom 2 days a week. The library allows the use of the teen room, which is not in operation during school hours. A small closet and file cabinet are provided to store some supplies, but students must keep their belongings with them when traveling into the community. The library staff has been supportive of the program, allowing the use of the computers, copiers, and printers in the teen room. Likewise, the program staff has been creative over the years, providing training in independent living skills for the life-skills students. Being out in the community affords students the opportunity to participate in real-life activities, such as banking, shopping, and travel training.

The current program also has partnered with a local special education collaborative for the past several years. The collaborative rents a classroom at a local college, and students from various districts may attend full or part time. The district discussed in this dissertation sends the postsecondary students there 2 days a week but only for academic classes. Although the partnership has been successful, it is not without challenges. For instance, the school district must pay tuition to the collaborative—money that could be allocated to the postsecondary program directly if all aspects of the curriculum were included under one program and team.

In conclusion, the CAMPUS program outlines the curriculum, personnel, and space needed to implement a successful postsecondary program on a college campus. A college campus is an appropriate location for life-skills students in this age group. The benefit of collaborating with a college or university that has an OT program is in allowing OTP students direct access to fieldwork opportunities. These OTP students would gain hands-on experience working on IADLs and other treatment modalities with special education students. A permanent location on a college campus would allow the postsecondary program to provide valuable, age-appropriate life experiences for students with ID, autism spectrum disorder, and neurological disabilities.

### **CHAPTER TWO – Project Theoretical and Evidence Base**

Postsecondary programs for special education students have been incorporated in public education with enactment of the Individuals with Disabilities Education Act ([IDEA], 2004; U.S. Department of Education [DOE], 2020). Today, postsecondary programs for students in life-skills transition programs must incorporate vocational training, continuing education, independent living opportunities, and community participation (Bouck, 2010; Rose et al., 2005; Stewart, 2009). By maintaining their postsecondary programs on high-school campuses, these schools prevent the students from accessing age-appropriate peer support, and thus miss valuable opportunities. Research has shown that students with intellectual disabilities (ID) have similar goals and aspirations as their neurotypical peers (Hartman, 2009; Rogan et al., 2014). To illustrate, as high-school seniors in general education classes graduate, they continue their education at institutions of higher learning or enter the workforce. Likewise, seniors in a life-skills program—who have completed 4 years of high school—also want to advance their opportunities to enter the workforce or take continuing-education classes.

### **Background of Transition Services**

Traditionally, students with ID received academic instruction in self-contained classes to learn functional academics and life skills. *Intellectual disability* is defined as "a developmental condition that is characterized by significant deficits in both intellectual functioning and adaptive behavior, including conceptual, social and practical skills" (Tassé, 2016, p. 1). Over the last several years, students with ID have had opportunities to participate in general education classes, as well as in sports and extracurricular activities

(Neubert & Moon, 2006). Many of the changes that supported students with ID in accessing general education classes resulted from legislative policy changes in the IDEA (2004). The IDEA describes two transition periods for students with disabilities: The first period occurs when a child receiving early intervention services transitions to public school, typically at the age of 3 years (U.S. DOE, 2020). The second takes place when the student turns 14 years old.

This second period is called *transition to adulthood* and is explained under Part B of the IDEA (2004). Practice recommendations from IDEA include "strategies for accessing and succeeding in general education courses, instruction in functional academics and community-based skills, and transition services to facilitate post-school planning with adult agencies" (Neubert & Moon, 2006, p. 2). Transition to adulthood planning is part of the student's individual education plan and includes measurable postsecondary goals based on age-appropriate assessments. Transition planning starts before the student turns 16 years old. Specialized instruction, related services, and development of educational, vocational, and community opportunities are incorporated into the transition plan. As set by the Office of Special Education and Rehabilitation Services ([OSERS], 2017), these objectives and goals relate to specialized instruction, related-services provision, employment development, community opportunities, and, if appropriate, independent-living skills. The special education team involves the student, parents, special education teachers, related-service providers, and adult service agencies such as the Department of Developmental Services.

A key component of the high-school transition plan, according to OSERS (2017),

is employment development. Meaningful employment is essential to health and wellbeing. Work provides a sense of self-worth, purpose, and independence; work environments can build relationships and create social connections. The financial stability that comes with employment ensures that daily living essentials (i.e., food, shelter, transportation, and recreation) are provided (Rosner et al., 2020).

Students with ID can benefit from participating in vocational training to improve their quality of life. However, despite all the benefits of employment, students with ID are less likely to find meaningful paid employment than are their neurotypical peers. Unemployment rates for people with disabilities pose a serious concern in the United States. In 1998, eight of 10 adults without a disability were employed full or part time, compared to only three of 10 adults with a disability (Luecking & Certo, 2003). Unfortunately, little has changed in the last 20 years. According to the National Report on Employment Services and Outcomes in 2016, only 35% of people with disabilities participated in the labor force (Winsor et al., 2016). Employment for transition students (16–21 years) with ID was 18%—less than half for those without disabilities (Grigal & Papay, 2018).

As the demand to include postsecondary education programs for students with ID increases, school districts have been trying to create the best possible programs to meet the needs of these students and their families. Some school districts tried to incorporate community involvement while keeping students based on their high-school campuses. Other districts simply placed students in private, out-of-district programs at considerable cost to the home school district.

The evidence-based literature supported that providing all the necessary components in the transition plan, under the recommendations set forth by the IDEA (2004), has posed challenges for many school districts (Eismann et al., 2017; Gardner et al., 2012; Rose et al., 2005). Often, the occupational therapy practitioner's (OTP) involvement at the high-school level—especially the transition level—is minimal. "Even though occupational therapy practitioners, as related service providers in the public schools, have the skillset to support IDEA-related objectives for postsecondary transition, they are infrequently involved in secondary transition planning" (Berg et al., 2017, p. 2).

New and creative programming is needed to successfully transition students into adulthood. Occupational therapy practitioners can play a key role in creating and assessing transition goals and objectives. The American Occupational Therapy Association's ([AOTA], 2020) *Occupational Therapy Practice Framework*, 4th edition, defined OT as

the therapeutic use of everyday life occupations with persons, groups, or populations (i.e., the client) for the purpose of enhancing or enabling participation. Occupational therapy practitioners use their knowledge of the transactional relationship among the client, their engagement in valuable occupations, and the context to design occupation-based intervention plans. (p. 1)

Despite the professional training and distinct abilities that OTPs have for assessing and implementing client-centered services for students with disabilities at the transition level, few OTPs are involved in transition processes (Eismann et al., 2017; Kardos & White, 2005; Pierce et al., 2020). According to Eismann et al.'s (2017)

descriptive analysis, only 7.5% of students with ID received OT services during their transition-to-adulthood years. The literature also stated that transition services should be provided in the least restrictive environment with age-appropriate services (Gardner et al., 2012; Rose et al., 2005). As such, OTPs could provide evidence-based interventions through the students' participation in meaningful occupations such as work, community, leisure, and life skills.

### **Collaborating with OT Programs**

The AOTA (2016) outlined the purpose of *fieldwork education* as "propel[ing] each generation of occupational therapy practitioners from the role of student to that of practitioner" (p. 1). Academic occupational therapy (OT) and occupational therapy assistant (OTA) programs are expected to develop curricula and provide fieldwork experiences to insure competent, entry-level practitioners (Accreditation Council for Occupational Therapy Education, 2018). There is high demand for fieldwork placements, and college-level OT programs struggle to place all their students in these valuable learning experiences (Bonsaksen et al., 2019; Knecht-Sabres, 2013).

The evidence-based literature was limited regarding OTPs working with students with ID who participate in postsecondary programs on college campuses. Hence, there is also limited literature on OT fieldwork educators being able to supervise OTP students directly on the campus. However, several studies identified the benefit of implementing community-based fieldwork, as well as simulated and group models, for fieldwork experiences. The role of the fieldwork supervisor and the significant contribution they make to the OT profession is well documented (Crist et al., 2007; Herzberg, 1994;

Mason, 1999). Herzberg (1994) described these supervisors as "the gatekeepers who maintain the quality standards of the occupational therapy profession by providing professional socialization and by acting as role models" (p. 817). The perceptions, attitudes, and motivations of supervisors and students greatly affect the success of any fieldwork placement. Graduating competent, entry-level OT and OTA students is the culmination of course work taught in the academic program, the learning experience provided through the fieldwork placement, and the relationship developed between the fieldwork educator and the student. This last element, the dynamic relationship between supervisor and student, is key to a successful fieldwork experience.

What do supervisors and students identify as a quality fieldwork experience? Most OT students identified good interpersonal skills, respect and support for students, clearly defined goals and expectations, positive and constructive evaluation, and feedback as valuable qualities in an effective fieldwork supervisor. Supervisors need to be explicit about learning opportunities in the fieldwork setting for OT students.

Given the shortage of fieldwork placements, group models have been shown to be an effective alternative to traditional one-on-one fieldwork supervision (Bonsaksen et al., 2019; Mason, 1999). In a group model, one fieldwork educator supervises two or more OTP students. To enhance their clinical skills, the OTP students present case studies on clients with whom they worked regularly. In group discussions after each case study, the OTP students can share their experiences with one another and discuss various therapeutic approaches (Knecht-Sabres, 2013; Mason, 1999). Participating in group supervision is one way in which OTP students can compare and relate their observational

skills to theoretical knowledge learned in the classroom. They can apply general skills, such as problem-solving and communication, to therapeutic interventions (Bonsaksen et al., 2019; Mason, 1999). Research also revealed that students are interested in linking theory into practice. Fieldwork experiences enable OTP students to apply the theory they learn in the classroom to the needs of the environment (Knecht-Sabres, 2013).

School-based OTPs can bridge the current gaps in both the literature and the fieldwork placements by creating innovative transitions programs through partnerships with key stakeholders such as community businesses, entry-level OT programs, and nonprofit organizations. Creating a transition program on a college campus offers students with ID and neurological and autism spectrum disorders the opportunities to interact and develop social skills with age-related peers. Further, partnering with a local college or university that offers an OT program affords OTP students an opportunity to begin fieldwork practice directly on campus while working with students with ID.

### **Occupational Therapy Fieldwork**

Fieldwork is an integral part of learning for OT students. It is a collaborative effort among students, academic coordinators, and fieldwork educators. Fieldwork educators who supervise OT students provide valuable insight from their respective fields and organizations. Today, shortages in fieldwork placements have been identified both nationally and internationally. Adding to this shortage is the increasing enrollment of new students and the growing number of new OT programs in the United States over the last decade (Evenson et al., 2015). Placing students in traditional one-on-one fieldwork with fieldwork educators has become increasingly difficult. Because OTPs are being employed in many more nontraditional settings, it is important for academic coordinators to take a more creative look at fieldwork placements. The OTPs in nontraditional settings can provide opportunities to expand fieldwork experiences that reflect the growth in current practice.

### **Application of Theory**

Social cognitive theories are used in the development of health education, research, psychology, programs, and communication. They are guides to assist in changing behaviors. Among the several social cognitive theories are the theory of planned behavior (TPB) and the transtheoretical, health belief, and self-determination (Rhodes & Mark, 2012) models. In this study, Albert Bandura's (1989) social cognitive theory (SCT) and the TPB form the basis for designing the College Access Maximizing Participation for Us (CAMPUS) program.

### Social Cognitive Theory

Bandura's (1989) SCT evolved from social learning theory. According to Bandura, the core SCT assumption is that humans are active information processors who think about the relationship between their behavior and its consequences. Knowledge, skills, beliefs, rules, and attitudes are gained through observing and interacting with other people. "Human behavior has often been explained in terms of one-sided determinism. In such modes of unidirectional causation, behavior is depicted as being shaped and controlled either by environmental influences or by internal dispositions" (p. 2). Bandura explained human behavior as a dynamic, three-way, reciprocal model. Environmental influences, personal factors, and behavior continually interact and influence each other. "Because of the bidirectionality of influence between behavior and environmental circumstances, people are both products and producers of their environment. They affect the nature of their experienced environment through selection and creation of situations" (p. 4).

*Self-efficacy* is the driving force of SCT. It drives humans' desires to model others' behaviors and vice versa. Often, when people see others whom they perceive to be similar to themselves succeed, they in turn believe that they too can succeed. Selfefficacy influences people's goals and the effort needed to attain those goals. Further, people with high self-efficacy are more likely to persevere and stay the course to reach their goals (Bandura, 1989; Schunk, 2012).

### Theory of Planned Behavior

Ajzen (1985) introduced the TPB, which was expanded from the theory of reasoned action that Fishbein and Ajzen (1975) developed. The TPB introduces the concept of *perceived behavioral control*, positing that individuals perform a given behavior by their *intention* to perform that behavior. Intentions are reflected in attitude, motivation, subjective norm, and perceived behavioral control toward performing the desired behavior (Ajzen, 1991). They capture the goal-oriented nature of human behavior.

Intentions are assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior. (p. 181) The stronger a person's intention to participate in a behavior is, the more likely that person would be to carry out the action.

### **Key Propositions**

Bandura's (1989) SCT posited that cognition, self-efficacy, and environment work together to form an individual's belief system. The SCT addresses behaviors that influence both the physical and social environments of individuals. The first assumption of SCT is that individuals learn by observing and imitating others. Second, SCT proposes that learning is an internal cognitive or mental process that may or may not lead to a behavior. Third, individuals learn about the appropriateness, as well as the consequences, of behaviors. Finally, human behavior is directed toward goals, and that behavior becomes increasingly self-regulated. Self-efficacy is the overall driving force in learning and carrying out behaviors. Bandura (2013) defined self-efficacy as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (p. 1). That is, a person's self-efficacy determines how that person thinks and feels, and it motivates them to behave in a certain manner. Table 2.1 summarizes key SCT elements as they apply to this doctoral project.

## Table 2.1

Summary of Key Elements of the Social Cognitive Theory's Reciprocal Determinism and

the Connection to a Life-Skills Transition Program

Key element	Brief description of key element	Application to doctoral project
Person	Knowledge, skills, beliefs, rules, attitudes are gained through observation and interactions with other people. These factors influence environment and behavior.	Life-skills students (18–22 years old) can model the behavior of social, vocational, and activities of daily living from age-appropriate peers and coworkers.
Environment	Environmental influences shape and control behavior and personal experiences.	Participation on a college campus and in the local community provides opportunities to interact with peers and coworkers.
Behavior	Behavior is influenced by personal and environmental factors.	Students' confidence increases. They develop a positive attitude toward vocational and social situations.
Self-efficacy	Represents a person's belief in their ability to succeed in specific situations or accomplish a task; belief in themselves.	With increased vocational and social skills, students can increase independence in vocational and social situations.

Personal and environmental *inputs* include a person's skills, strengths,

weaknesses, self-efficacy, cultural background, and living situation. These inputs affect how successful behavior change will be met. The individual then determines through modeling, cognitive processes, reinforcement, and self-regulation whether the behavior is of value and worth incorporating into their life. *Output* is the behavior change and attainment. The following series of if-then propositions supports SCT:

• *If* there is an increase in self-efficacy, *then* the greater the desire or motivation there is to learn.

- *If* there is an increase in motivation, *then* there is an increase in the performance or action of the behavior.
- *If* there is an increase in performance or action, *then* the greater the increase in reaching the desired outcome.

Figure 2.1 illustrates Bandura's three-way reciprocal model encompassing the broad scope of SCT. It demonstrates how the person, environment, and behavior interconnect and shape and influence life choices.

# Figure 2.1

Bandura's Three-Way Reciprocal Model



### **Comparison Between SCT and TPB**

Figure 2.2 illustrates the several overlapping, as well as different, constructs

between SCT and TPB.

### Figure 2.2

Comparison of Bandura's Social Cognitive Theory and Ajzen's Theory of Planned

Behavior



### **Similarities**

One similarity between SCT and TPB is that both evolved from earlier theories. That is, SCT evolved from Bandura's (1977) theory of social learning, and TPB was an addition to Fishbein and Ajzen's (1975) theory of reasoned action. Both SCT and TPB contain constructs that can be applied to various subject areas. These theories are useful in designing programs and interventions for individuals, as well as for community and health education. In addition, SCT and TPB both regard people as having the ability to engage in behaviors based on information from norms, beliefs, prior experiences, and the environment. A key component of both theories is the concept of behavioral control.

Self-efficacy is a major component of SCT. Bandura (1994) explained, "Selfefficacy is the belief in one's ability to influence events that effect one's life and control over the way these events are experienced" (p. 71). In other words, individuals decide how to behave based on their abilities to accomplish goals. Ajzen's (1987) concept of perceived behavioral control aligns with Bandura's concept of self-efficacy. Perceived behavioral control is an individual's perception of their level of ease or difficulty when performing particular behaviors. Interestingly, both Bandura and Ajzen had papers published in the same journal—at the same time—regarding behaviors in health.

### Differences

Bandura (1989) theorized that from the beginning, an individual learns behaviors from a series of steps: (1) attention, (2) retention, (3) reproduction, and (4) motivation. The individual then internalizes the observational process and, based on the consequences, determines whether they will perform the behavior. The TPB constructs differ somewhat from those of SCT, in that TPB posits that behavioral change is determined by the individual's *intentions*, rather than potential *consequences*. In TPB, past experiences, subjective norms, and perceived behavioral control influence the intentions that lead to the desired outcome.

SCT contains a similar number of constructs as, but includes more subdivisions than, TPB. "Instead of a single intention, it [SCT] distinguishes between proximal and
distal goals; instead of beliefs about behavioral consequences and social norms, it refers to physical, social, and self-evaluative outcome expectations" (Ajzen, 1998, p. 737). A key aspect of SCT is the concept of self-evaluation whose primary goal is to explain how people regulate and maintain their behavior through control and reinforcement. Many cognitive theories explain how people initiate behavioral changes, but SCT discusses how they achieve goal-directed behaviors that can be maintained over time (Bandura, 1998).

# **Implications for Program Intervention**

Social cognitive theory can be used in real-life applications to design educational programs for students with ID. Bandura (1998) explained human behavior as a dynamic, three-way, reciprocal model. Environmental influences, personal factors, and behavior continually interact and influence each other. Designing a postsecondary program on a college campus based on Bandura's SCT of reciprocal determinism would incorporate that person–environment–behavior model by including several key propositions, as shown in Table 2.2. Students in a life-skills program would be able to attend classes and participate in vocational opportunities on a college campus with age-appropriate peers. A change from a high-school to a college environment would encourage students with ID to increase their independence and develop age-appropriate social skills with their neurotypical peers.

# Table 2.2

Predictions From Bandura's Social Cognitive Theory in the Context of Designing a Post-High-School Program on a College Campus

Selected propositions from soc	What this predicts in the context		
<i>If</i>	Then	of my doctoral project	
If students with intellectual	then they will increase	Students with ID have the same	
disabilities (ID) attend a	their motivation to	desire as their neurotypical peers graduating high school. Moving	
college campus program	continue learning and	on to a college campus provides new opportunities to make friends	
	develop new friendships.	and expand their environment.	
If students increase social	then they will be more	Students will be able to attend	
skills	likely to participate in	activities and classes on campus.	
	social-related activities		
	with age-related peers.		
<i>If</i> students with <i>ID</i> are given	then they will be able to	Students will have the opportunity	
opportunities to work on a	increase vocational	to develop new vocational skills and experiences either on campus	
college campus or in the local	skills.	or in the community.	
community			
<i>If</i> students increase	then they learn valuable	Students may obtain paid	
independence for job-task	job skills.	positions.	
completion			

Salastad propositions from agial aggritive th

Social cognitive theory is a comprehensive theory to use in the overall creation and design of a postsecondary program on a college campus. Structuring and developing the program would take a macro-level approach. On the other hand, TPB presents a more simplified or streamlined theory in which individual students, given support, could create their own goals for participation in the postsecondary program. The intentions of each student would help map and direct the outcomes of their desired behavior changes or actions. An example would be a student who intends to participate in more social activities on campus. Following TPB, given positive support from the subjective norm (i.e., staff and peers), this student knows he or she is capable of attending the activities. The student's intention is strong; thus, the student is more likely to succeed in participating in the desired outcome. Using Bandura's (1989) SCT and Ajzen's (1991) TPB theory helps create a postsecondary program that addresses not only the program implementation, but also many of the students' individual needs and goals. By moving the program away from the traditional high-school model, the program can provide these students with new vocational, community, and social experiences.

#### **Occupational Therapy Interventions**

There is limited literature on the role that OTPs play in supporting employment for young adults with ID in postsecondary programs. Although limited, the literature nevertheless supported OT interventions through mentorship programs and group therapy, as well as through direct services in instrumental activities of daily living (IADLs), vocational, and social-skills training (Gardner et al., 2012; Rose et al., 2005; Wilson et al., 2018). Vocational training, travel training, and ADL skills are key

components of any postsecondary program (Bouck, 2010; O'Neill & Gutman, 2020; Taylor & Seltzer, 2011). To illustrate, many students with ID may not be able to obtain a driver's licenses due to their physical or cognitive challenges. Thus, providing traveltraining instruction is a crucial component of the postsecondary program. As part of the curriculum, students learn how to travel on public transportation, read bus and train maps, and follow street safety rules.

One main goal in delivering a comprehensive postsecondary program is to assist students who are transitioning to the adult world of work. The transition program is designed to provide real-life experiences through vocational opportunities. According to the OSERS (2017), a key component of the high-school transition plan is employment development. Meaningful employment is essential to health and well-being. Work provides a sense of self-worth, purpose, and independence. Work environments can build relationships and create social connections, and financial stability from employment ensures that daily living essentials—food, shelter, transportation, and recreation—are provided (Rosner et al., 2020). Thus, students with ID can benefit from participating in vocational training to improve their quality of life.

Young adults with ID or neurological disorders or autism spectrum disorders often fall behind their peers without disabilities in gaining paid employment. Estimates in the literature showed that 35% of young adults with autism or ID obtain paid employment within 8 years of exiting high school, with the majority of employment in unskilled labor jobs (Gilson et al., 2017; Smith et al., 2017; Taylor & Seltzer, 2010). Yin et al. (2014) supported this estimate, finding that individuals with disabilities are more likely to be employed in lower skilled jobs and thus earn lower wages. "Poverty looms more heavily over the disabled population. In 2011, nearly 28% of non-institutionalized people with disabilities in the United States, 21–64 years of age, lived below the poverty line, compared with 12% of people without disabilities" (p. 2).

Occupational therapy practitioners can provide effective intervention strategies for students with ID, especially toward job development. Further, OTPs provide essential task analysis, grade and modify tasks, and adapt the work environment as needed to successfully compete on the job (Arikawa et al., 2013; Cantu, 2003; Eismann et al., 2017). Research supported the OTPs' role for participating in postsecondary transition programs: OTPs provide evidence-based interventions that promote the job-readiness, time-management, social, and communication skills that contribute to successful outcomes for students in postsecondary transition programs.

# Conclusion

The goal of this doctoral project is to demonstrate the benefits of creating a highschool transition program on a college campus that hosts an OT program. Currently, the post-high-school program located in an eastern Massachusetts school district is led by an occupational therapist who is well positioned to establish a relationship with an OT program—a relationship that can mutually benefit the transition students and the OTP students. Many OT academic classrooms and laboratories have simulated kitchen, laundry, and bedroom spaces. Allowing the postsecondary transition students access to those OT laboratories will provide them with valuable practice and engagement in lifeskills activities such as cooking and homemaking tasks. The occupational therapist running the transition program can collaborate with the OT programs to provide Level I, and possibly Level II, fieldwork supervision directly on campus. Then, the OTP students would have the opportunity to work with the high-school transition students via group work and ADLs. Another benefit of hosting a program on a college campus is the potential to create paid internships for vocational learning and training.

Identifying the current model and the challenges the program faces is the first step in moving the program forward (see Figure 2.3 for the explanatory model). Current challenges include the high cost of partnering with an outside agency, which creates inconsistencies between student goals and plans. Further, lack of a permanent space is not conducive to fostering and building independence in ADLs because, for example, transition students currently cannot access equipment needed to work on homemaking or cooking activities. Eliminating the outside-agency partnership would free funds that could be used to expand the transition program.

# Figure 2.3

Explanatory Model



By instead partnering with an OT program (and its laboratory spaces) on a college campus, the program would provide transition students with the ability to work on homemaking skills such as cooking, laundry, and housecleaning tasks. Another important benefit to collaborating with an OT program is that transition students could engage in social-related skills with age-appropriate neurotypical peers. Access to college-campus life also provides opportunities for students to participate in work tasks and other social activities. The OTP students would benefit, as well. They could engage in fieldwork placements with the OT transition coordinator acting as the fieldwork supervisor.

Successfully expanding the transition program to a college campus involves the cooperation and planning of various stakeholders. The steps needed to successfully transition require concluding the current outside contract and contracting with the local OT program. Clearly, collaboration with the college administration and OT program is necessary to begin this process. Therefore, support from the school district is crucial because new staff will be needed to support the CAMPUS program. A successful outcome for this transition model to be included on a college campus is a program that allows students with ID to engage with age-appropriate neurotypical peers, participate in college activities, and gain valuable life skills.

#### **CHAPTER THREE – Health Promotion**

The College Access Maximizing Participation for Us (CAMPUS) program addresses at-risk students in the postsecondary life-skills transition program. This preventative program at the client-centered level provides education and hands-on learning opportunities in vocational training, activities of daily living (ADLs), instrumental activities of daily living (IADLs), social skills, and community awareness.

The primary goal of this transition program is to increase students' skills in everyday meaningful occupations. According to the American Occupational Therapy Association's ([AOTA], 2020) Occupational Therapy Practice Framework, 4th edition, *occupations* are activities performed every day by individuals, families, and community members to occupy time and provide meaning and purpose to life. "Occupations are categorized as activities of daily living, instrumental activities of daily living, health management, rest and sleep, education, work, play, leisure, and social participation" (p. 47). The purpose of the CAMPUS health and wellness program is to educate students to increase their independence in everyday occupations. Bandura's (1977) social cognitive theory (SCT) posited that "humans are active information processors and think about the relationship between their behavior and its consequences" (p. 4). This theory proposes that interactions among behaviors, cognitions, and the environment result in learning.

Four main assumptions of SCT apply to developing the CAMPUS program. The first is that individuals learn by observing and imitating others. Knowledge, skills, beliefs, rules, and attitudes are gained through observing and interacting with other

people. Second, learning is an internal cognitive or mental process that may or may not lead to a behavior. Third, individuals learn about the appropriateness, as well as the consequences, of behaviors. Fourth, human behavior is directed toward goals, and the behavior becomes increasingly self-regulated.

These elements of Bandura's (1977) SCT support the premise for a postsecondary program. Students participating in the CAMPUS program will learn IADL skills in nutrition, shopping, health and wellness, and other independent-living skills. Students will also develop vocational skills to assist them in obtaining employment after graduation. Finally, they will engage with neurotypical peers in community activities, on and off the college campus, to increase their social skills.

Key aspects of the CAMPUS program are education and real-life participation in daily life skills. Too often, postsecondary life-skills students struggle to manage self-care routines, such as meal preparation, homemaking, grooming, and hygiene tasks. They also find navigating social situations challenging, especially in the community or on the job. Students with intellectual disabilities (ID) value the occupations of work, leisure, and community life just as their neurotypical peers do. However, these meaningful occupations can be disrupted or hindered if the students cannot independently carry out their self-care routines. Further, students who have limited peer interactions are thus deterred from engaging in meaningful social activities (Gardner et al., 2012; Rogan et al., 2014; Stewart, 2009). The occupational therapy (OT) practitioners (OTPs) who work with this population have a distinct role in addressing these challenges.

#### **Postsecondary Services**

Postsecondary programs for special education students have been incorporated in public education since 1997, upon enactment of the Individuals with Disabilities Education Act (2004; U.S. Department of Education, 2001). Any students identified through an individual education plan (IEP) are entitled to receive special education services through their 22nd birthdays (Massachusetts Department of Secondary Education [MA DESE], 2020). Thus, many life-skills students remain in postsecondary or transitional programs on high-school campuses until they turn 22 years old—which means they stay in their high schools for 6 years. Over the last decade, many school districts have looked to alternative programs outside of the high-school setting to deliver postsecondary services. These alternatives include programs in community-based and college-campus settings (Moon et al., 2001).

In Massachusetts, students are entitled to public school special education services (as determined by the IEP) until their 22nd birthdays. Two years prior to graduating from public school or turning 22 years old, the students are referred to state services through the Chapter 688 referral process. The primary goal of the Chapter 688 referral process is to document and plan adult services for students with severe disabilities. The referral alerts transition agencies, such as the Massachusetts Department of Developmental Services, Massachusetts Rehabilitation Commission, and Massachusetts Department of Mental Health, as well as the state legislature, about these students' future needs. In cases where students are determined to be eligible for services but those services are not provided due to a lack of funding or program availability, agency personnel can advocate

to increase funds for the next fiscal year to provide for the needed services (MA DESE, 2018).

# **Background Story**

The author of this study is an OTP and has been running-a postsecondary program at a Massachusetts public school for 10 years. This program was created at the request of parents seeking to expand transition services for their children. The original team included the school district's special education director, the high-school life-skills teacher, and this author, a school-based OTP. This education team worked with community leaders to develop the program within the city. The directors of the public library, the YMCA, and the senior center were instrumental in helping to move the program off the high-school campus and into the community. Over the years, the education staff has provided many community-service learning internships and life-skills experiences. However, one drawback to the program has been a lack of adequate facilities to address the students' independent-living skills, such as home management. For instance, assisting students in meal-preparation tasks is greatly hindered by not having access to a kitchen. Further, although students are active in the community, they have limited opportunities to interact with age-related neurotypical peers. Many of the transitional students have few social activities at home and look forward to the program's planned community trips.

Students in this postsecondary program live in an urban city in eastern Massachusetts. Approximately 50% of them live at or below the poverty level, based on data from the school district's lunch program. Many of their families rely on local food

pantries. The students demonstrate poor diets and are unaware of healthy food choices. They often come to school without a lunch or simply bring an unhealthy snack and soda and typically report not having eaten breakfast in the morning. This common problem affects their ability to effectively participate in other meaningful occupations, such as work or community activities.

Another significant challenge observed for many students is their overall personal hygiene. Students have difficulty showering regularly and maintaining good oral hygiene. They often come in wearing the same clothes they wore the day before, which poses a particular problem at their vocational sites. These health issues are just a few of the challenges the postsecondary students face daily. Increasing these students' ability to take control and independently carry out these self-care activities will help them engage in meaningful occupations.

#### Moving to a College Campus

The goal of this project is to create a postsecondary program on a college campus that has an OT department. The program will be provided for life-skills students aged 18 to 22 years with documented ID. A primary benefit of establishing a relationship with an OT program at a local community college or university would be the use of the OT academic classroom and laboratory. There, post-high-school students in the vocationaland living-skills program would have access to a classroom that includes kitchen, laundry, and bedroom spaces. Another potential benefit for the life-skills students may be paid on-campus internships for vocational learning. In return, this program is designed to create onsite Level I (and possibly Level II) fieldwork placements for the OTP students.

#### **Designing a Postsecondary Program**

#### **Intended Outcomes**

The desired outcome for the CAMPUS program is for students with ID to participate in everyday occupations, such as work, ADLs, IADLs, leisure, and community activities. To successfully engage in these occupations the students need to take a more active role in their overall health and well-being. Students not only participate in valuable occupations but, upon completion of the program, will have learned basic self-care and health-management skills and the importance of nutrition and exercise.

# **Priority Population**

Students in the transition program are young adults, 18 to 22 years of age, with documented diagnoses of ID or neurological or autism spectrum disorders. All students have an IEP, which provides special education services in Massachusetts public schools until the student's 22nd birthday (MA DESE, 2020). The students are similar in age, live in the same city, and live at home with their families. However, they come from various socioeconomic backgrounds, ranging from middle class to well below the poverty level (50%). It is a culturally diverse group with English as a second language for some families. The students graduated from the high-school life-skills program and were referred to the postsecondary transition program.

# **Objectives**

- Students will each participate in two to three IADL classes each month and learn to complete multistep tasks, such as creating a grocery list, making a bed, or preparing a meal, with 100% accuracy by the end of the school year.
- Students will each learn three new vocational skills each quarter (e.g., washing tables, cleaning fitness equipment, or restocking books in the library) with up to two to three verbal prompts from staff.
- 3. Students will each engage in two to three community activities each month, given staff support. By the end of the school year, students will be able to attend a familiar on-campus activity with a peer with 100% accuracy.

#### **Guiding Theoretical Framework**

Bandura's (1977) SCT has been widely used as a theoretical framework for studies in health-care, education, and media platforms. The theory explains the ways in which individuals observe, learn, and model behavior. It posits that humans' drive to accept or reject a behavior is shaped by their personal experiences, self-efficacy, and environmental influences. Thus, SCT can facilitate changes in a wide variety of behaviors and explain how positive changes can occur in individuals' daily occupations. As such, SCT-based behavioral interventions targeting key lifestyle changes in self-care, diet, and exercise may effectively improve occupations and quality of life for young adults with ID. Key SCT components include:

- Self-efficacy: Change students' habits in diet and exercise through education. Students learn that by making small adjustments, such as adding a 20-minute daily walk, they will be able to change a behavior or habit in a few weeks.
- Behavioral capability: Educate students on making healthy life choices, for example, in diet, exercise, and meaningful leisure and work occupations.
- Reciprocal determinism: Create a healthy environment. The program will work with students and parents at home to encourage healthy lifestyles.

#### Community

Community-based participatory research fosters relationships among community, academic, and other agency stakeholders by focusing on research and program development (Wallerstein et al., 2015). This participatory type of research is used to test concepts and develop program and materials with specific populations. In particular, it assesses people's beliefs, perceptions, and behaviors to develop culturally appropriate interventions. Community involvement in the research includes:

- Initial engagement: The initial plan of the CAMPUS program would bring together the public school special education director and superintendent, the college OT director, and other public school personnel (i.e., OTP, paraprofessionals, special education teacher, nurse, and guidance counselors).
- Empower communities: Collaboration between the college OT director and school-based OTP can create social activities that match the goals and objectives written in students' IEPs. Life-skills students can participate in college campus social activities with OTP students or other college volunteers. The life-skills

students will engage in on-campus vocational tasks, as well as in ADL tasks at the OT laboratory.

• Collective goals: The goal of the CAMPUS program is to improve vocational skills, IADLs, and community awareness for young adults with ID.

# **Role of Personnel**

Highly qualified staff are necessary to implement the CAMPUS program. Student volunteers and mentors from the college or university are needed to help support the transition students in accessing campus facilities and engaging in campus activities. Table 3.1 lists the personnel needed to implement the CAMPUS program and their roles.

# Table 3.1

Role of Personnel

Personnel	Role
Occupational therapist	Facilitate and implement learning strategies, assess cognitive and motor skills of students, designate other responsibility and duties of the program, and coordinate other disciplines.
Paraprofessionals	Assist students with technology, written assignments, and hands-on activities as needed throughout the program. Co- lead small group discussions, lessons, and provide job coaching as needed.
Director of the college/university occupational therapy (OT) department	Coordinate with school-based OTP to develop activities and classes between OTP students and the postsecondary students.
OT practitioner (OTP) students	Prepare activity analysis for hands-on assignments such as leisure interests, grocery shopping, and self-care.
Postsecondary students	Complete assignments, work as a team during small group lessons. Participate in vocational tasks, community activities. Maintain good attendance.
Parents/caregivers	Attend Zoom meetings and read handouts.
Librarians	Create session with students to teach them how to access alternative technology (i.e., text-to-speech programs, videos, and audiobooks).

# Administrative Assessment

Young adults with ID are at a disadvantage when it comes to employment opportunities and community involvement (Gilson et al., 2017; Smith et al., 2017). The CAMPUS program provides students with opportunities to work on important life occupations, such as vocation, leisure, health management, ADLs, and IADLs. The program accepts all students referred from the high school after their senior year. Policies, regulations, personnel, and educational resources are crucial components to program development and implementation (Appendix A: Learners Guide for Administrators).

- Policies and regulations: According to the Office of Special Education and Rehabilitation Services (2017), the transition plan includes specialized instruction, related services, employment development, community opportunities, and independent living skills implementation.
- Personnel: The program requires highly qualified staff to implement the program.
   Staff members may include the OTP, special education instructor,
   paraprofessionals, librarians, and health-related service providers.
- Educational resources: The program requires access to the college OT classroom/laboratory, Internet, digital devices, printed handouts, and materials.

#### **Evaluation Plan**

Participants for the evaluation plan include not only these postsecondary students in the transition program, but also paraprofessionals and the college OTP students. The OTP will determine the effectiveness of the program outcome based on analysis of the collected data. The data will consist of pre- and post-tests and journal entries, as well as feedback questionnaires from the participants. Transition students will complete written assignments and keep digital diaries of their job tasks, ADL skills, and community activities as a personal yearbook. The OTP will complete an activity analysis for the various lessons in self-care, meal preparation, vocational, and organizational tasks. The results of this information analysis will be used to modify the program to improve its effectiveness.

#### **Potential Barriers and Challenges**

A potential barrier to the CAMPUS program is limited access to the OT laboratory or classroom space on the college campus. Inadequate access can affect the students' ability to work on tasks such as cooking and homemaking. Other potential barriers would be the administration's reluctance to move the program away from its current location (downtown library) and outside contract. Changes in community partnerships may also affect vocational opportunities for the students and staff turnover.

# **CAMPUS Model**

The CAMPUS program will take place on a community college or university campus with access to the OT program's academic classroom and laboratory. The program runs Monday through Friday and follows the public school academic year. The staff members involved in the program—all employees of the public school district include paraprofessionals, a special education teacher, a behavior specialist, and this author, an OTP. Other related-service providers may be involved, depending on each student's IEP.

Six modules with lessons plans have been created for students to engage in the learning objectives set by the MA DESE (2015) for transition planning. The modules include education and training: vocational training, nutrition education, community skills, organizational skills, IADLs, and current events. Every week, students will participate for 2 full days at a designated job site for community-service learning opportunities, 2 half-days for IADL skills and nutrition education in the OT laboratory, 2 half-days for

classroom discussions focusing on organizational skill building and current events, and 1 day for community skills.

Community skills include travel training on local public transportation and participation in campus-life activities. Students will engage in IADLs through hands-on learning activities assigned in the OT laboratory under the module, "Apartment Living Skills." These skills will teach students how to cook basic meals, clean their apartments, make their beds, and do laundry. The community module allows students to learn street safety skills and how to take public transportation (e.g., bus, train, subway) through weekly community trips to local museums, stores, parks, malls, bowling alleys, and theaters. Students also participate in college campus activities with volunteer college student mentors at sporting events, concerts, and dining in the cafeteria.

Students will rotate through the vocational training program 2 days per week, working 5- to 6-hour shifts during the school day. They will work with one or two other students and a job coach at various work sites. Finally, the in-class lessons will discuss and teach students to budget, shop, and create a resume, as well as vocational training and organizational skills to increase independent living (Appendix B: Campus Life).

#### **Program Modules**

A total of six modules address all content and activities for participation in the postsecondary CAMPUS program (outlined in Table 3.2). These modules address the areas of organizational skills, vocational training, nutrition education, community, IADLs, and current events.

Module	Topic	Content and activities	Research to support the program	Applicable theory principle
1 Organization skills	Your Agenda!	Lessons: Learn how to keep a weekly agenda; discuss weekend plans; work as a team to select social activities and community trips; set personal goals.	Social cognitive theory (SCT) explains the way in which individuals observe, learn, and model behavior (Bandura, 1994).	Interpersonal theory level: SCT self- efficacy
		Calendar activities: Itineraries, time management, organizing assignments, using a smartphone		
		Activities: Create itineraries (e.g., a trip into Boston to obtain TAP Passes).		
2 Vocation Work site Let's Work Together! Work portfolio	Lesson: Participate in community-service learning opportunities 2 days/week for 5–6 hour shifts.	Young adults benefit from real- life job experiences (Gilson et al., 2017).	Community- level theory: Empowering	
	Let's Work Together!	Lesson: Learn about team building and working together on a job site.	"Groups of individuals develop a sense of social cohesion and a	communities
		Activity: Community-service learning project at local food bank.	willingness to take action for the common good. Research suggests that perceived	
	Work portfolio	Lesson: Complete resume, reference list, cover letter.	collective efficacy is strongly related to student achievement in	
		Activity: Practice interview skills and dress for success: The interview!	schools" (Kelder et al., 2015, p. 164).	
3 Nutrition education	Prep & Pack!	Lesson: Learn meal-preparation skills, task organization, and time management.	Students with intellectual disabilities (ID) often have a	Interpersonal theory level:
		Activity: Make a lunch-bag list in class (students will have a complete list, written or pictorial,	pertaining to their lives. Simple decisions such as where, when,	capability

# **Table 3.2**College Access Maximizing Participation for Us (CAMPUS) Modules

Module	Topic	Content and activities	Research to support the program	Applicable theory principle
		from home). Pack a healthy snack, lunch, beverage, and fruit that night and bring to school the next day.	and what to eat are often dictated by family or caregivers (Hanson-Baldauf, 2011).	
	Make it Easy recipes!	Lesson: Dietician teaches students how to create five easy no-cook meals for breakfast or lunch.	Communication with local, registered dietician shows that no cook meal options are simple and easy to prepare (A. Egizi, personal communication, July 28, 2020). Young adults with ID eat fewer fruits and vegetables than the recommended daily allowance. Studies show that digital photographing is a suitable method for data collection with these young adults (Wallen et al., 2013).	
		Activity: Create personal meal-plan booklet of all recipes and snack ideas.		
	Healthy Swaps	Lesson: Educate students that by making small adjustments, they can change a behavior or habit in a few weeks. Switch one unhealthy snack for one healthy option.		
My Plate Pla		Activity: Create food diary using their phone or other digital device showing fruit and vegetable intake at the beginning of the program and how much they increased throughout the program.		
	My Plate Plan	Lesson: The My Plate Plan is introduced as part of a healthy eating program.		
		Activity: Learn about the four basic food groups and portion control.	Adolescents benefit from using	
		Lesson: Librarians teach students how to access Internet and alternative technology (e.g., text-to- speech programs, videos, audiobooks).	hands-on tools such as the My Plate Plan to visualize portion control and understand food groups (U.S. Department of Agriculture, 2020).	
		Activity: Use computer time to pair up and participate in online games and educational videos available at the My Plate Plan website.		

Module	Topic	Content and activities	Research to support the program	Applicable theory principle
4 Apartment living (IADLs)	Keep it Tidy!	Lesson: Students learn basics of living on their own.	Occupations shared between two or more are termed co- occupations are the most interactive of all social occupations. Central to the concept is that two or more individuals share a high level of physicality, emotionality, and intentionality (AOTA, 2020).	Interpersonal theory level: social cognitive theory: self- efficacy
		Activity: Hands-on practice in occupational therapy (OT) lab. Students work with OT students to clean kitchen, set table, make bed.		
	Invited guests	Lesson: Students learn about dining etiquette and conversation skills.		
		Activity: Students will invite OT students to lunch in the OT lab to practice dining skills.		
5 Community engagement	Travel training	Lesson: Street safety (e.g., crossing at lights, crosswalks, reading one-way and do-not-enter signs, etc.).	SCT explains the way in which individuals observe, learn, and model behavior (Bandura, 1994).	Interpersonal theory level: behavioral capability
		Activity: Given a map, travel to destination.		
	Grocery shopping	Lesson: Navigate a grocery store; learn perimeter method of shopping (healthier foods, fruits, veggies on outside aisles).		
		Activity: Plan shopping trip to local grocery store, using shopping list of ingredients from recipe. Use produce list available ahead of time from the store to locate items.		
6 Current events	What's Happening	Lesson: Learn and discuss local and world news.	SCT explains the way in which individuals observe, learn, and model behavior (Bandura, 1994).	Community- level theory: empowering communities
		Activity: Complete "What's Happening" worksheet using the local daily newspaper.		
		Activity: Read and discuss weekly <i>Time for KID</i> magazine in small groups.		

#### **Organizational Skills**

These students require assistance with many organizational tasks. Thus, lessons in organization include how to manage time, use a smartphone, keep an agenda or calendar, and organize work and class assignments (Appendix C: Organizational Lessons). Students are required to keep an agenda book (calendar) either in a written planner or on their phone. Each week, they update their agenda books to include work schedules, appointments, and social activities. Once a month, students collaborate with each other to determine which social events and community trips will be taking place, decide which to attend, and then plan itineraries for each scheduled event. Itineraries include time frames, budgets, route maps, and how to dress for the events. Budgeting for each community trip involves the students going to the bank prior to the event to withdraw the correct amount of money needed. This allows students to further work on social skills by interacting with the bank tellers.

#### Vocational Training

Research has shown that real-life job experiences provide the best models for vocational training (Bazyk, 2005; Gilson et al., 2017; Neubert & Redd, 2008). In years past, many prevocational programs used repetitive "work boxes" to teach students to sequence tasks. For example, students would roll utensils in a napkin and place them in the finished box. Although the students learned the specific task, the task provided little carryover to or meaning on an actual job site. Providing real job experiences gives students a sense of accomplishment and purpose (Appendix D: Vocational Lessons).

Students will have the opportunity to participate in community-service learning

jobs at least 2 days a week. Jobs sites include the senior center, a local city-owned farm, a long-term care facility, the YMCA, and a food pantry. College campus jobs may include the dining hall, administration office, fitness facility, and maintenance. The OTP will assess the students and administer pre- and post-test skills assessments. Monthly, job coaches, with input from worksite supervisors, will complete job checklists.

Students will complete a learner profile, which will provide student-driven information to enhance the assessment process.

Assessment of the learner includes attending to the three determinants of learning; 1) learning needs—what the learner needs and wants to learn, 2) readiness to learn—when the learner is receptive to learning and 3) learning style—how the learner best learns. (Bastable et al., 2019, p. 283)

These determinants enable educators, job coaches, and internship supervisors to identify and present information that will best serve the student population. Students often work directly with staff and supervisors from the job site. Coworkers and supervisors are very responsive and supportive of the students in the postsecondary program but often have questions about how best to interact and provide supervision.

Class participation is also part of the vocational curriculum. Classes include building a portfolio, which entails the students writing their resumes and cover letters and gathering references. Students are required to ask permission from individuals, job coaches, supervisors, and coworkers before listing their names as references. Roleplaying interviews during class can help reduce the students' fears and anxieties about the actual interview. Students take turns performing both parts—employer and potential applicant. They also complete job applications online and in paper form in class.

#### Nutrition Education

Research has shown that poor nutrition can have a significant impact on occupations and quality of life for adults and children (Hanson-Baldauf, 2011; Lauria & Waldrop, 2020). Students with ID are at a higher risk for developing chronic health issues, such as diabetes, high cholesterol, obesity, and hypertension, due to their poorer nutrition compared to their neurotypical peers (Pett et al., 2013). Designing nutrition and meal-preparation curriculum into the transition program provides students the opportunity to increase their independence in IADLs, including health management and maintenance, along with meal-preparation tasks (Appendix E: Nutrition Education Lessons). Occupational therapy can provide the skills and training needed to address these IADLs (AOTA, 2020).

Access to the OT practical laboratory kitchen has significant benefits for the CAMPUS program's nutrition curriculum. Students will be able to learn cooking and kitchen-safety skills while preparing healthy meals. Lessons in nutrition education include the *Prep & Pack* program and the *My Plate Plan* (U.S. Department of Agriculture, 2020). A local dietician has offered to teach classes on healthy meal ideas and on how to read food labels. Students will have the opportunity to create grocery lists for meals and to food shop at local grocery stores. They will work with the college OTP students to create meals, set the table, and dine as a group. These activities also allow the students to work on dining etiquette, table manners, and conversation skills.

# Conclusion

Studies supported that providing life-skills instruction and real-life experiences are crucial to creating a successful transition program (Bouck, 2010; Eismann et al., 2017). Designing the CAMPUS as a postsecondary program on a college campus will provide students with ID the opportunity to increase their independence in IADLs, vocational skills, health management, and community involvement. Occupational therapy can provide the skills and training needed to address these valuable occupations (AOTA, 2020).

#### **CHAPTER FOUR – CAMPUS Program-Evaluation Plan**

#### **Program Scenario and Stakeholders**

The goal of the College Access Maximizing Participation for Us (CAMPUS) educational-intervention program is to demonstrate the benefits of creating a postsecondary high-school transition program led by a school-based occupational therapy (OT) practitioner (OTP) on a college campus. Partnering with a college or university that has an on-campus OT program would create opportunities to develop fieldwork placements supervised by the school-based OTP who runs the CAMPUS program. In turn, completing a postsecondary program on a college campus allows life-skills students with intellectual disabilities (ID) aged 18 to 22 years to practice instrumental activities of daily living (IADLs) alongside age-related peers while preparing to transition into the adult world.

The CAMPUS program will take place on a college campus with access to an OT laboratory and academic classroom. The program runs Monday through Friday throughout the public school academic year. Staff members involved in the program are current employees of the public school district—paraprofessionals, a special education teacher, a behavior specialist, and this author (an OTP). Other related-service providers may be involved, depending on each student's individual education plan (IEP). Six modules with lessons plans were created for students to engage in learning objectives set by the Massachusetts Department of Secondary Education ([MA DESE], 2015) for transition planning. These modules include vocation, nutrition, community skills, organizational skills, IADLs, and current events education and training. Students will participate for 2 full days each week at a designated job site for community-service learning opportunities, 2 half-days for IADL skills and nutrition education in the OT laboratory, 2 half-days for classroom discussions focusing on organizational skillbuilding and current events, and 1 day for community skills. Community skills include travel training on local public transportation and participation in campus-life activities.

Designing a new educational program requires support from several key stakeholders. According to the United Nations Development Program (2017), "Effective stakeholder engagement enhances project acceptance and ownership and strengthens the social and environmental sustainability and benefits of supported interventions" (p. 4). It is essential to develop strong connections with school administrators from the university and secondary school. Specifically, cooperation between the college OT department and the secondary school's special education department is a key to the program's success. Other invested stakeholders are the parents of students in the postsecondary high-school program, the program's support staff, and, most importantly, the postsecondary students and their families.

#### Vision for Program-Evaluation Research

Partnering with an OT academic program on a college campus would allow the transition students opportunities for hands-on, real-life work on life occupations, such as homemaking skills, cooking, laundry, and basic housecleaning tasks. Other important benefits to this collaboration would be opportunities for the transition students to engage in social-related skills with age-appropriate neurotypical peers and to participate in work tasks and other social activities.

The college OTP students would benefit, as well. There is a growing shortage of fieldwork placements, and college OT programs struggle to find adequate placements to provide their students with these valuable learning experiences (Bonsaksen et al., 2019; Knecht-Sabres, 2013). Partnering the CAMPUS program with a college or university that has an OT academic program would afford those OTP students with opportunities to begin fieldwork practice directly on campus by working with students with ID. The OTP students could engage in Level I fieldwork placements with the OT transition program coordinator acting as the Level I fieldwork supervisor. This scenario meets the qualifications for Level I placement under the Accreditation Council for Occupational Therapy Education standards, Sections C.1.8 and C.1.9.

By collecting and analyzing program-evaluation data from the CAMPUS program, this program designer hopes to understand whether an environmental setting (i.e., college campus) that is more progressive than the past setting (i.e., downtown library) would provide young adults with ID greater success with their IEP goals in IADLs, peer-related social interactions, and vocational skills. Formative evaluation will provide information regarding participants' satisfaction with the program, the usefulness of material, and the practicality of the college environment and fieldwork experiences. Furthermore, the data will provide insight into where the intervention program's strengths and weaknesses lie and show where changes need to be made. Summative program evaluation will help determine if the CAMPUS program effectively enhances and enriches opportunities for transition students with ID.

#### **Stakeholder Engagement**

Providing a clear logic model to key stakeholders is important so they can see and understand a visual model of the program design. Transition planning has become an especially important part of the IEP process over the last several years. School districts are mandated to provide postsecondary programming (MA DESE, 2015). However, albeit limited, studies have shown that keeping students in high-school life-skills programs after their senior year is not as effective as moving into community or college environments (Moon et al., 2001). Further, OT programs are currently in need of fieldwork placement opportunities. Thus, having a school-based OTP—one who can provide Level I fieldwork supervision in exchange for access to the OT laboratory—on a college campus with the postsecondary students is a "win–win" situation for both the college and the high-school administrators.

Individuals most interested in the success of the CAMPUS program are the posthigh-school students who participate directly in the program and the paraprofessionals responsible for the program's day-to-day operations. Additionally, parents want to see their children continue to progress as they transition into the world of adulthood. Other invested stakeholders are public school administrators, especially the special education director and superintendent. Their support of the program can provide needed resources, such as approval for transportation, staffing, and allocation of money for materials. Running a full transition program under the special education department would eliminate costly out-of-district placements for post-high-school students. Finally, the director of the college or university's OT department has a vested interest because new

opportunities for fieldwork placements will be available for their OTP students.

# Simplified Logic Model for Use with Stakeholders

The logic model in Figure 4.1 describes the participants in the post-high-school program and the interventions these students will engage in during their time on campus. The primary diagnoses for participating students include ID and neurological and autism spectrum disorders. The program requires staff support, mainly from the school-based OTP, paraprofessionals, and job coaches already employed by the school district. The program outputs detail the resources needed for students to access the program. Short-, intermediate-, and long-term outcomes identify the students' progress throughout the program.

# Figure 4.1

Logic Model

Clients Resources	<ul> <li>Post-secondary high school students (18-22 yrs) with intellectual disabilities.</li> <li>OT, support staff, paraprofessionals.</li> </ul>
Interventions Activities	<ul> <li>Vocational training 2 days a week Peer mentoring w OT students.</li> <li>Weekly travel training w MBTA IADL's; homemaking, meal prep, banking, shopping.</li> <li>Participation in college campus activities (sporting events, dining hall, etc).</li> </ul>
Program Outputs	<ul> <li>College campus location.</li> <li>Transportation.</li> <li>Access to OT lab on campus.</li> </ul>
Short-Term Outcomes	<ul> <li>Increased independence w home &amp; community IADL's.</li> <li>Increased work skills Increased social skills</li> <li>Improved travel training skills.</li> </ul>
Intermediate Outcomes	At one month post students will - have on-campus schedule of classes have an OT mentor assigned - have 1 new job assignment.
Long-Term Outcomes	<ul> <li>Complete basic homemaking tasks Attend 1-2 social activities with decreased support</li> <li>Increase ability to navigate to and from campus &amp; home.</li> <li>Work at job site for 5-6 hours, with lunch break.</li> </ul>

#### **Preliminary Exploration and Confirmatory Process**

The vision of the CAMPUS is one of a postsecondary program led by the schoolbased OTP and located on a college campus that has an OT department. The partnership between the school-based OTP and the university or college OT department will provide Level I, and possibly Level II, fieldwork placements directly on campus. In turn, completing a postsecondary program on a college campus allows transition students aged 18 to 22 years with ID to practice IADLs alongside age-related peers while preparing to enter the adult world. The program currently is based at a local library with little peer support and limited facilities to practice life skills. The goal of the college-based program is to provide age-appropriate work opportunities, leisure interests, and life-skills activities on campus with the support of the college OT department. The school district will provide transportation between home and the program site. The program runs throughout the public school academic year.

# **Program-Evaluation Research Questions by Stakeholder Group**

Responses to program-evaluation questions will be gathered from administrators and program staff personnel through email questionnaires. Student responses will be gathered directly in the classroom in the form of face-to-face interviews, in which students will be interviewed by familiar staff personnel. Each stakeholder group will be asked different questions based on their interest in the program's outcomes (Table 4.1). Table 4.1

Research Question by Stakeholder Group

Stakahaldar	Program avaluation research question	
Stakenolder	riogram-evaluation research question	
Researcher	• Quantitative: Will the program participants (postsecondary students) report increased perceived confidence in using the skills they have gained?	
	• Qualitative: Was the program content and delivery sufficient for students in the postsecondary program to begin using the skills taught?	
Postsecondary students and	Qualitative:	
paraprofessionals	• Was the information presented relevant?	
	• Was the information presentation too complicated?	
	• Was teaching delivered at an optimal pace and intensity for learning?	
	• Were the program manual, modules, and lesson plans explicit enough for group leaders to facilitate the program?	
	• Was the program duration (i.e., class lecture time or lab time) adequate or should it be shorter or longer?	
	• Which program modules were most effective?	
	• Is there anything that should be changed to improve program content or delivery?	
	• What other key issues or problems faced by participants were not addressed in the program?	
	Quantitative:	
	• Did participants gain needed knowledge consistent with their individualized education plan goals?	
	• Did participants gain perceived confidence in their ability to increase homemaking skills?	
	<ul> <li>Did participants gain perceived confidence in increasing social skills?</li> </ul>	
Stakeholder	Program-evaluation research question	
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Public school administrators:	Qualitative:	
superintendent/special	• Does program content match organizational goals?	
education director	• Does program content align with Massachusetts Department of Secondary Education transition planning goals?	
	• Were program paraprofessionals sufficiently prepared to apply the learning content to the students in the program?	
	• Did post-high-school students and family members in the intervention report a favorable experience with the program outcomes?	
	• Were any problems or issues reported?	
	• Did external factors impede research methodology execution?	
	Quantitative:	
	• Will the research data show the intervention led to desired change in dependent variables of interest?	
	• Can the research data be used to demonstrate improved quality of care provided to recipients of the intervention?	
	• Did the program positively affect students' reported job satisfaction?	
	• Are outcomes consistent with proposed theoretical justification?	
	• Is program delivery more costly than other means of delivery?	
	• What were the rates of program withdrawal?	

## **Research Design**

#### Formative (Qualitative) Design

Qualitative data will be gathered through surveys and one-on-one interviews. Questions regarding the program success may include, "What aspects of the experience were most helpful?", "What part was most stressful?", "What part of the program would you like to have spent more time learning?", and "What changes would you like to see in the program?" The questions will be sent through a platform such as SurveyMonkey or Survey Maker with a numerical code assigned to each participant to protect confidentiality. Participants will answer open-ended and multiple-choice questions online using their personal computers, and nonbiased staff will conduct the face-to-face interviews to maintain confidentiality. Audio-recorded sessions will be conducted only with the participant's permission.

#### Summative/Quantitative Design

Quantitative data will be collected by written or electronic questionnaires or rating-scale measures. Questions directed toward program staff may include, "Which community trips were the simplest to navigate by public transportation and why (e.g., shortest walking distance, fewer bus stops)?", "Did the information provided address program outcomes?", and "Did participants gain needed knowledge consistent with their IEP goals?" Questions rated on a Likert-type scale from 1 (*not important*) to 5 (*extremely important*) may include, "How often did students use their written job-aid checklist during work?" and "During the first quarter, how many times did Student A, B, or C participate in on-campus social events?" These questions can be repeated and measured

each quarter during the school year.

## **Survey Development**

The purpose of the surveys is to gain insight into the effectiveness of the CAMPUS program. The survey questions are designed to determine whether and to what degree the intervention program for postsecondary-school students participating on a college campus was delivered as intended and the program content was appropriate. Student feedback is vital to understanding the impact of the program; however, given the students' cognitive limitations, standard surveys and questionnaires be may difficult to administer. Thus, student satisfaction will be measured and obtained through verbal, pictorial, or yes–no responses.

Paraprofessionals provide job coaching and training in IADLs and social skills, as well as assist in functional academic classes. They work directly and daily with the students. Given the paraprofessionals' commitment and dedication to the students' success, they have a vested interest in the program's operation and insight into the program's effectiveness. Their input is needed to assess the program's strengths and weaknesses. Survey questions for paraprofessionals will be a mix of rating-scale and short-answer questions with a word limit. The paraprofessionals will be given time to complete the survey before or after school, when students are not in session, using school computers or other devices. Their responses will be sent through a program such as SurveyMonkey or Survey Maker, with a numerical code assigned to ensure participant confidentiality. All data will be securely stored on the program designer's hard drive and backup drive. The 1-to-5 rating scale will allow participants to rate the importance or

clarity of various categories of the program's design. Six paraprofessionals work in the existing postsecondary program. Each has 3 years or more of experience working with students with ID aged 16 to 22 years and holds an associate or bachelor's degree in education or a related field.

The CAMPUS program is designed to move the postsecondary program out of the high-school setting and on to a college campus. The program provides age-appropriate learning experiences and opportunities for students with ID to interact with neurotypical peers. Hence, the survey categories will address program satisfaction, effectiveness of laboratory opportunities, functional academic classes, usefulness of the material, and practicality of the college environment and vocational experiences. These categories align with the modules in the postsecondary program (Appendices C–E), which include vocational training, IADLs, community skills, organizational skills, and nutritional education. The modules adhere to the standards required by the MA DESE (2015) for transition planning. Further, the survey questions address information that is needed to gain insight into the strengths and weaknesses of the program's content (Appendix F). Rating the importance or benefit of certain lessons and experiences will be most useful in determining which aspects of the program's content to keep, modify, or eliminate. In addition, this survey will help researchers determine whether program outcomes were met.

## Methods

The primary goals of the formative and summative program-evaluation designs are to ensure that the intervention program for post-high school students participating on

a college campus was delivered as intended and that the program content was appropriate. The program will run the entire school year (September to June), and data collection will take place at the end of each quarter within that year.

The public school district does not have an institutional review board. Therefore, approval for the CAMPUS program evaluation will be obtained through the school district's legal consultant, special education director, and superintendent. Confidentiality will be ensured by storing data on the program designer's personal-computer hard drive and backup drive. Participants will be assigned an anonymizing number code for data analysis and complete all surveys on their personal computers. The researcher will analyze the data using a statistical analysis program, such as SPSS or Qualtrics, and solicit assistance from another registered occupational therapist familiar with the program intervention. Together, they will analyze and compile the results.

#### Formative (Qualitative) Data Collection Methods

All life-skills students will be selected to provide formative information. Thus, for students, inclusion criteria for the program evaluation is the same as for the CAMPUS program: the student (a) is 18 to 22 years old, (b) has a documented intellectual disability, neurological impairment, or autism spectrum disorder, and (c) was selected to the program based on the transition plan developed at the IEP meeting in their senior year of high school. Because many participating students have cognitive impairments, they will complete a simplified survey of eight to 10 yes–no questions an online survey platform such as Qualtrics. They can complete the survey in class, using their own Chromebooks (which the school district provides to all students in the program). A trained

paraprofessional will read the questions aloud to students in need of assistance.

Formative data will also be collected from the paraprofessionals who work directly with the students. Paraprofessionals work in all aspects of the post-high-school program daily and will participate on campus with students to provide job coaching and IADL and social-skills training and assist in functional academic classes. Their input is needed to assess the program's strengths and weaknesses. Data collected from the paraprofessionals will be in the form of responses to short-answer surveys with a word limit.

By the end of the school year prior to the launch of the program, students and paraprofessionals will be given a preliminary survey asking their opinions about the current transition program and about moving the program to a college campus. Then, beginning with the program launch, surveys and interviews will be conducted after each quarter grade closes.

## Data Analysis Plan

### Formative (Qualitative) Data

Assigning participants to small groups and designing open-ended surveys with a word limit will allow the researcher to export all data, use an analyzer software program to find common themes, and then code each item. Results will be shared with an experienced qualitative researcher to verify that the data analysis is correct and represents the participants' input.

### Summative (Quantitative) Data

Data from the students participating in the CAMPUS program, as well as the paraprofessionals assisting them, will be collected via a survey on the Qualtrics platform. The transition students will complete the survey in class using their personal Chromebooks; paraprofessionals will complete the survey at home or after school. Survey responses will use rating scales and yes–no questions. The researcher and another OTP, familiar with the program, will collaborate in the data collection. All data reviewers will undergo bias training. Having another OTP examine the material before and after analysis will enhance the rigor of the analysis.

Independent variables may include student attendance in the program and participation in each module, staff turnover, and changes in work sites and financial resources. The dependent variables are the students' independence with IADLs, social skills, community participation, and work skills. The data will be compiled from Qualtrics, with analysis software such as SPSS to facilitate cross-referencing the information gathered. Having other researchers unrelated to the program review the analysis of the findings will help ensure that the themes chosen are not biased toward the program.

### **Disseminating Program-Evaluation Research Findings**

A strong strategy to disseminate the benefits of the CAMPUS program will increase awareness of the research and maximize the impact the program can have in improving educational outcomes for the priority population (i.e., postsecondary students). Thus, it is essential to disseminate the findings in ways that each key stakeholder group

will be able to comprehend the research results and program benefits.

School district administrators will need a comprehensive but concise executive summary report (Appendix G) that includes the research findings and recommendations and a description of the postsecondary program's background, overall design, priority population, and importance. Describing the program's curriculum and how it adheres to the state's core standards will have the greatest impact in persuading school and special education administrators of the program's value. Information disseminated to these stakeholders will demonstrate how creating in-house programs, such as this postsecondary transition program, reduces costs and the number of students placed out of the district. Further, many parents are aware of the state's mandates about transition planning and are seeking quality programming for their children. Thus, impact statements from parents of transition-age students that demonstrate the need for and parental support of the program will be disseminated to these administrator stakeholders.

Another group of stakeholders, the program staff, will want information disseminated in an outline format with a killer introductory paragraph. Providing basic information with concrete examples of the program's modules and how they will be carried out will be most relevant to paraprofessionals.

A brochure for parents interested in the CAMPUS program will provide a simple and straightforward description of the program and its goals, whereas students may benefit from a quarterly newsletter showing the program's activities and events. Each quarter, the students can provide personal success stories describing what aspects of the program were most beneficial. These newsletters could be distributed to participating

students and their parents, as well as to parents and students potentially interested in the program.

## Conclusion

The desired outcome for the CAMPUS program is for students to participate in everyday occupations such as work, activities of daily living, IADLs, leisure interests, and community activities. To engage in these occupations, students need to take a more active role in their overall health and well-being. In the CAMPUS program, they will not only participate in valuable and meaningful occupations, but upon completion of the program also will have learned basic self-care, health-management, time-management, and vocational skills. Participation in the program will help students to become active, contributing members in their communities.

#### **CHAPTER FIVE – Funding Plan**

The College Access Maximizing Participation for Us (CAMPUS) program will benefit special education students entering the final transition period from public education to adult services or to the workforce, based on the goals and objectives established in their individual education plans (IEPs). The envisioned postsecondary high-school program will be led by the school-based occupational therapy (OT) practitioner (OTP) and located on a college campus with an OT department. The partnership between the school-based OTP and the university or college OT department will provide Level I, and possibly Level II, fieldwork placements directly on campus. Completing a postsecondary program on a college campus allows students 18 to 22 years old with intellectual disabilities (ID) to practice instrumental activities of daily living (IADLs) alongside age-related peers while preparing to transition into the adult world. The current program, which is based at a local library, offers few such interactions with neurotypical peers. Thus, a college-campus-based program will provide students with opportunities to gain and experience work, leisure, and life skills with the support of the college OT department.

Because the program will take place on a college campus, it will have access to the OT classroom and laboratory to provide hands-on experiences. The program will run Monday through Friday and follow the public school academic calendar. Staff members involved in the program are current employees of the public school district. They include the author, paraprofessionals, a special education teacher, and a behavior specialist. Other related-service providers may be involved based on each student's IEP. Full-time paraprofessionals will be needed to work directly with students as job coaches to support the day-to-day on-campus activities. The number of paraprofessionals needed will be based on enrollment and the IEP service-delivery grid. General classroom size for the program is 10 to 15 students. The school district will provide transportation to and from home and campus.

### **Available Local Resources**

Several local resources are available on and off campus to assist with the CAMPUS program. The college or university's student activity center will be a valuable resource for postsecondary students to engage in on-campus leisure and recreational activities. In addition to the OT Department, collaboration with other undergraduate programs, such as those for special education, student teachers, and nursing students, could provide access to volunteers and internship opportunities to engage with the postsecondary students. Many colleges also have a career center that can assist the transition students with their future career goals. Other outside organizations, such as the nonprofit group You're with Us, bring college students together with high-school and postsecondary students for activities such as sporting, art, and music events.

## Budget

Table 5.1 identifies the funding needed to operate the program for a typical 10month school year. The operating costs are expected to remain consistent in the second and third years. Salary changes would be effective thereafter based on the union and the school district's contract negotiations. The current postsecondary program has been operating for several years and the staff, including the school-based OTP and paraprofessionals, are already included in the school budget.

# Table 5.1

Budgeted item	Justification	Cost	Total cost, Year 1ª
Salary			
Program developer	Program developer creates and modifies program in addition to full-time duties and responsibilities.	Full-time employee school district salary: \$80,000 (based on the FY2020/21 school budget)	\$80,000.00
Paraprofessionals x 3	Paraprofessionals provide academic and job-coaching support for students.	Three full-time equivalent school district salary average: \$22,000	\$66,000.00
Data collector	Paraprofessionals will assist with data collection.	Calculated in with paraprofessional salary	
Program evaluator	Evaluator analyzes statistical data outcomes to-determine if objectives were met, and qualitative data to determine if current methods and topics meet the needs of the priority population.	Stipend paid to another occupational therapist from the district to ensure unbiased evaluation of the program. \$30/hour, 2 hours/month, 10 months in Year 1	<u>\$600.00</u>
Total salary			\$146,600.00

Expenses for the College Access Maximizing Participation for Us (CAMPUS) Program

Budgeted item	Justification	Cost	Total cost, Year 1 <sup>a</sup>
Material			
Time for KID (up to 20 students/	Classroom material for functional academics	\$71.20/year subscription for print and digital	\$140.20
staff) Educational helper		\$69.00/3-year subscription online unlimited downloads	
Cooking supplies and groceries	Students participate in weekly cooking classes to improve activities of daily	\$150/month (average cost of groceries for two cooking classes per week)	1,800.00
	living skills	Cooking supplies already owned by current program	
Travel training: Staff Charlie Cards (MBTA)	Students learn to take public transportation to increase independence in the community. Staff are needed to work as travel trainers.	\$55/month Includes four cards for staff to use for bus and train fare each week https://www.mbta.com/gui des/bus-guide	660.00
Pre- and post- assessments	Assessments will determine if the program is meeting course objectives and meeting the needs of the priority population.	Pre- and post-tests available at no cost and completed online. Hard copies available as needed.	0
Direct program staff Chromebooks x 3	All public school students and staff receive Chromebooks from school district. IT support provided by school district	\$20/month/device x t devices for staff = \$720 https://static.googleusercon tent.com/media/www.goog le.com/en//chromebook/sta tic/pdf/Chromebooks_for_ Education.pdf	720.00

Budgeted item	Justification	Cost	Total cost, Year 1ª
Printer and ink	Printer and ink cartridges are	\$379.99	379.99
	required because the program facilitator will need to print handouts.	https://www.bestbuy.co m/site/hp-officejet-pro- 9015-wireless-all-in-one- instant-ink-ready-inkjet- printer- gray/6320038.p?skuId=6 320038	
Paper	Paper needed for handouts	\$25.00	25.00
	and student work.	Five reams/case at Staples	
Classroom/	University will share OT	\$0	0
laboratory	classroom/laboratory with postsecondary program.	Provided free by college/university	
Transportation	School district provides	\$,1400.00	1,400.00
(contractual)	transportation.	Transportation to/from home/school based on school district's FY2020/21 budget	
Statistical Package for the	Data collector will use SPSS program for statistical	\$1,188.00 for 1-year subscription	1,188.00
Social Sciences analysis of quantitative of (SPSS)		https://www.ibm.com/m arketplace/purchase/conf iguration/en/us/checkout ?editionID=EID5HFZ6	
or Qualtrics	Currently, Qualtrics is offering free survey-data analysis.	https://www.qualtrics.co m/blog/70ualtrics- survey-software-free/	<u>\$0.00</u>
Total material			\$6,313.19

Budgeted item	Justification	Cost	Total cost, Year 1ª
Total program	Salary		\$146,600.00
cost	Materials		6,313.19
	Dissemination cost		<u>\$668.03</u>
	subtotal		\$153,581.22
	without SPSS		<u>&lt;1,188.00&gt;</u>
	Total		<u>\$152,393.22</u>

Note. aCosts for Years 2 and 3 will increase slightly based on district contract for salaries.

### **Potential Funding Sources**

The existing postsecondary program received small amounts in grant funding in the past 3 years, and cultural and business grants before then. The cultural grants were awarded to expand art awareness. For instance, students were able to participate in several art classes taught by a local artist in the community. The local business grant was awarded to purchase start-up supplies and tools for students to create homemade crafts to sell at local fairs. However, expanding student training and IADL experiences, such as travel training, cooking, and community trips, will require additional funds. In addition, the postsecondary program will need to purchase public transportation cards, grocery supplies, and passes to local events (e.g., theaters and museums). Applying to new and previous grant resources can help offset the cost of these valuable experiences for postsecondary students. Table 5.2 lists previously awarded grants and potential new grants that may support the postsecondary program for students with ID.

## Conclusion

A college campus is an appropriate location to provide a comprehensive postsecondary program to enhance IADLs and work opportunities for life-skills students aged 18 to 22 years. Currently, the school district sends postsecondary students out of the district to attend academic classes at a collaborative for 2 days per week and pays tuition to the collaborative for these placements. However, if all aspects of the curriculum were included under one program and team within the district—that is, the CAMPUS program—then that tuition money that could be allocated to CAMPUS directly. The CAMPUS program could then provide the curriculum, personnel, and space needed to implement a successful postsecondary program on a college campus.

Table 5.2

Grant title / organization	Grant criteria	Award amount
Best Bet Grant / local business community	Public school programs are chosen based on three categories: innovation, educational objective, and financial impact.	Amount based on program need (average \$75–\$250); previously received \$250
Massachusetts Cultural Council	Massachusetts Cultural Council supports thousands of community-based projects in the arts, humanities, and sciences annually. Each year, the council awards grants to more than 6,000 cultural programs statewide. The program promotes availability of rich cultural experiences for every Massachusetts resident.	Average grants tend to be modest (\$500– \$750). Received \$500 in 2018 and \$500 in 2019
Transition Programs for Students with Intellectual Disabilities / Department of Education	Transition Programs for Students with Intellectual Disabilities supports programs that promote successful transition of students with intellectual disabilities (ID) into higher education and enable institutions to create high-quality, inclusive, model comprehensive transition and postsecondary programs for students with ID.	Estimated range of awards: \$100,000– \$500,000 Estimated average size of award: \$388,000
Student research grant / Boston University	Postdoctoral fellows working with Sargent College, primary faculty are eligible	Up to \$5,000: postdoctoral fellows up to \$2,500 require a minimum match of \$2,500 from the fellow's mentor
Implementation Research Grant / American Occupational Therapy Foundation	Implementation research grant funds advancement of occupational therapists supporting people's participation in meaningful activities of life using evidence-based practice.	\$50,000-\$100,000

### **CHAPTER SIX – CAMPUS Program Dissemination Plan**

#### **Program Description**

The College Access Maximizing Participation for Us (CAMPUS) postsecondary program is designed to engage students in all aspects of meaningful occupations, such as vocational, community, and leisure experiences while participating on a college campus. Its primary goal is to increase students' skills in everyday meaningful occupations. The CAMPUS program brings students who are aged 18 to 22 years and have intellectual disabilities (ID) to a college campus, where they can develop the skills needed to become active members in their communities. They practice instrumental activities of daily living alongside age-related peers while preparing to transition into the adult world. This postsecondary program will partner with an occupational therapy (OT) program on a college campus. Such collaboration will provide transition students the ability to work on life occupations, including homemaking, cooking, laundry, and basic housekeeping tasks. Further, the partnership provides the OT departments with fieldwork opportunities directly on campus.

#### **Dissemination Goals**

The CAMPUS program's vision is to act as an advocacy tool for postsecondary students, showing success by creating postsecondary opportunities for students with ID and other neurological challenges. It can benefit both the implementing school district and the colleges or university OT program. The primary long-term goal of the CAMPUS program is to provide work opportunities, leisure interests, and life-skills activities on campus with support from the college OT department. Running throughout the school district's academic year, the CAMPUS program meets the core standards criteria set by the Massachusetts Department of Secondary Education (2015) for transition planning. The curriculum reflects not only these core standards, but also goals and objectives based on each student's individual education plan. To achieve the program's ultimate goal and fully implement this curriculum, shortterm goals—such as partnering between the school-based OT practitioner (OTP) and university OT program for partial collaborations—can promote unique opportunities to benefit participants and stakeholders and reach the long-term goal. Entry-level OT students can participate in weekly remote learning classes or in-person group activities.

## **Target Audience and Key Messages**

Over the last several years, parents and educators have been campaigning for development of alternative programs for older special education students. They are asking for programs that focus on activities more appropriate to the students' ages, community environments, and higher education settings (Moon et al., 2001). As the demand for transition planning grows, public schools seek to create innovative programming that meets the needs of this underserved population. All students deserve a quality education; all can learn when they are provided a safe, supportive environment and are taught by highly qualified educators. This education goes beyond the classroom. For students to become productive members in society, the whole community has a responsibility to ensure academic success for every student.

## **Primary Audience**

The CAMPUS program's primary target audience are public school district administrators, especially special education directors and superintendents. These stakeholders' investment in the program will provide needed resources, such as approval for transportation, staffing, and allocation of money for materials. The benefit to school districts of running a full-time transition program under the special education department is that it eliminates costly out-of-district placements for postsecondary students. The CAMPUS program is designed to move postsecondary programs out of the high-school settings and on to colleges and universities.

## **Other Audiences**

The other important target audiences are the directors of the colleges or universities' OT departments. Currently, these departments are suffering a shortage of fieldwork placements and struggling to provide these valuable learning experiences to all their students (Bonsaksen et al., 2019; Knecht-Sabres, 2013). Thus, such OT programs have a vested interest in establishing new opportunities for fieldwork placements. The collaboration with the university will provide OTP students with opportunities to interact with the CAMPUS program's postsecondary transition students on campus, acting as mentors or participating in group or individual treatment plans.

## **Spokespersons**

The Massachusetts Department of Developmental Services assigns regional transition coordinators to assist school districts in placing students who have completed their secondary education. Prior to each student's 22nd birthday, these coordinators meet

with the students and their postsecondary school team and families to discuss the transition to adult services. Given their backgrounds and expertise, these transition coordinators can advocate the importance of a strong postsecondary program.

The OT director of the university where the CAMPUS program is piloted can speak to other university and college OT directors about the program's success, providing first-hand accounts of the collaboration between the postsecondary and OTP students. In this way, the CAMPUS program ties OT to its roots of providing a client-centered approach to treatment. Further, the OT students have opportunities to interact with special needs young adults in an age-appropriate setting.

## Dissemination

A strong strategy to disseminate program information would emphasize the benefits of the CAMPUS program, increase awareness of the research, and maximize the impact that the program can have in improving the educational outcomes for the priority population (i.e., postsecondary students). Written information in the form of a brochure and fact sheet (Appendix H) will be dispersed through email to the Administrators of Special Education (ASE) organization in Massachusetts and to the Massachusetts Association of School Superintendents (MASS). Printed copies will be provided at inperson meetings.

A PowerPoint presentation will be given during the MASS regional roundtable meetings. Poster presentations describing the CAMPUS program will be hosted at the annual conferences of the ASE and the Massachusetts Association of Occupational Therapy (MAOT). Further, the program developer will attend monthly special interest meetings, in-person and virtually, through MAOT.

Additional information will be available on the CAMPUS program's website. This includes monthly newsletters created by students and letters from parents describing the activities and benefits of participating in the program. Finally, results of the

CAMPUS program evaluation will be published in educational and OT journals.

# Budget

Financial resources are required to disseminate the results of the program. The planned budget includes creating and maintaining the CAMPUS program's website and other social media platforms, paying conference fees, printing posters for the conferences, and creating professional portfolios, brochures, and fact sheets for in-person stakeholder meetings (Table 6.1).

# Table 6.1

Item	Justification	Total cost
Website	Creating a website will assist in sharing pertinent information regarding program activities, benefits, and purchasing options.	\$0.00
	district.	
Conferences:	Conference fees:	\$440.00
MAOT, ASE, and MASS	Massachusetts Association of Occupational Therapy (MAOT): \$125.00	
	http://maot.org/event-Disseminating the information involves reaching out to the key stakeholders such as	

Dissemination Plan Budget

Item	Justification	Total cost
	public school and college administrators, Occupational Therapy directors from the college or university, parents and students. This would be accomplished through social media, emails and the school's website. This will help parents and students learn about the program. Another way to reach college and school administrators would be by attending state and local conferences. 4004391?CalendarViewType=0&SelectedDate=2%2F10 %2F2021	
	Massachusetts Administrators for Special Education (ASE) Statewide Conference: \$315 http://www.asepage.org/MARREG2021.pdf	
	Massachusetts Association of School Superintendents (MASS) Roundtable Meetings: \$0	
	https://www.massupt.org/massevents/#!event/2021/6/11/ northshore-supt-roundtable	
Materials	Poster prints: \$148.03	\$228.03
	Tabletop hook and loop, 72"-wide, 3-panel display	
	https://www.displays2go.com/P-15014/3-Panel- Display-Board-Black-Grey- Sides?st=Class&sid=1138	
	Brochures: \$25.00 – 25/pack	
	https://www.staples.com/Custom- Brochures/product335338	
	Fact Sheet: \$ 55.00 \$0.55/page for 100 copies	
	https://www.staples.com/Color-Copies/product_1798666	
Total dissemination cost		<u>\$668.03</u>
Program cost	Program budget (Table 5.1)	\$151,725.22
	Dissemination cost	<u>\$668.03</u>

Total <u>\$152,393.22</u>

## Evaluation

Evaluating the dissemination and presentation of the material will be conducted through questionnaires. Respondents will be asked how they heard about the program and which informational session they attended (e.g., roundtable meeting, special-interest meeting, or conference). They will rate the material presented according to which type provided the most important and pertinent information (e.g., brochure, fact sheet, website, or poster presentation). Success of the website can be measured by the number of site visits and email requests for further information.

## Conclusion

Continued success of the CAMPUS program lies in disseminating its results and program-evaluation findings to current and future stakeholders. This program takes a creative approach to assisting students with ID transition into the adult world of work and community living. It is vital to provide school districts and universities with timely information regarding the CAMPUS program. Although September typically begins the new year in most school districts, careful planning and implementation that begins well before then will allow consideration of budgeting costs before starting a new program.

## **CHAPTER SEVEN – Conclusion**

#### **Postsecondary Education**

The reenactment of the Individuals with Disabilities Education Act (2004) mandated transition services for children with disabilities. In Massachusetts, these services are provided to students with disabilities until they reach the age of 22 years. Special education students prepare for adult living during this transition period (ages 18 to 22 years), so transition services focus on improving academic and functional skills based on each student's needs. The transition plan is outlined in the student's individual education plan (IEP) and include individual goals and objectives (Massachusetts Department of Secondary Education, 2020). Related instruction may include functional academics, activities of daily living (ADLs), social skills, vocational training, and community participation. For many years, transition services for these students were offered only in high schools. Thus, as their neurotypical peers moved on to institutions of higher education or into the workforce, students identified in special education continued on the same track with limited advancements. Some remained on high-school campuses for 6 years.

A thorough review of the evidence-based literature revealed support for the need to conduct postsecondary programs beyond high-school campuses. Instead, transition services should be provided in the least restrictive environment with age-appropriate services (Gardner et al., 2012; Rose et al., 2005). Community involvement, vocational training, academic instruction, independent living skills, and engagement with ageappropriate peers are crucial to the success of a postsecondary program. Although the evidence-based literature was sparse regarding occupational therapy (OT) involvement in postsecondary programs, some key findings emerged. Occupational therapy practitioners have distinct skill sets to assess client-centered services for students with disabilities at the transition level. However, despite their professional training and distinctive abilities, few OT practitioners (OTPs) are involved in the transition process (Eismann et al., 2017; Kardos & White, 2005; Pierce et al., 2020). According to Eismann et al. (2017), a descriptive analysis showed that only 7.5% of students with intellectual disabilities (ID) received OT services during the transition-to-adulthood years. Within these services, OTPs provided evidence-based interventions through student participation in meaningful occupations such as work, community, leisure, and life skills.

#### **Occupational Therapy Fieldwork**

The American Occupational Therapy Association ([AOTA], 2016) outlined that the purpose of fieldwork education is to "propel each generation of occupational therapy practitioners from the role of student to that of practitioner" (p. 1). However, the evidence-based literature was limited in regards to OTPs working with students with ID who participate in a postsecondary program on a college campus. Hence, there was limited research about OT fieldwork educators providing supervision to OTP students directly on a college campus. Further, there is a growing shortage of fieldwork placements, and college OT programs struggle to find adequate placements to provide their students with these valuable learning experiences (Bonsaksen et al., 2019; Knecht-Sabres, 2013). A transition program physically located on a college campus would offer students with ID and neurological and autism spectrum disorders the opportunity to interact and develop social skills with age-related peers. School-based OTPs can bridge gaps in both the literature and fieldwork placements by creating innovative transitions programs through partnerships with key stakeholders, such as community businesses, entry-level OT programs, and nonprofit organizations.

#### **College Access Maximizing Participation for Us (CAMPUS) Program**

The existing high-school postsecondary program, located in eastern Massachusetts and operated out of a downtown library, lacks adequate facilities to address students' independent living skills, such as home management and meal preparation. Without a home base, students and staff have no place to store their belongings or work on long-term projects. Further, maintaining transition programs on high-school campuses limits the students' opportunities to interact with their age-related peers (Gardner et al., 2012; Rogan et al., 2014).

The College Access Maximizing Participation for Us (CAMPUS) program is designed to bring students aged 18 to 22 years with ID and neurological and autism spectrum disorders to a college campus to participate in postsecondary programming. The program would run Monday through Friday and follow the public school academic calendar. Staff members involved in the program are employees of a public school district in Massachusetts; they include paraprofessionals, a special education teacher, a behavior specialist, and the author. Other related-service providers may be involved according to each student's needs as documented on their IEPs. The CAMPUS program will partner with the college or university's OT department but will be run by the author, a school-based OTP. Establishing this partnership between the CAMPUS program and the college's OT department will provide the OTP students with opportunities for Level I fieldwork placements. The OTP students will gain experience working with the special education students from the CAMPUS program. They will have the opportunity to colead groups, act as peer mentors, and assist with ADLs under supervision from the school-based OTP. In exchange, the university's OT department will allow the CAMPUS program students to use the OT laboratory and academic classrooms.

Providing transition services on a college campus will expand the existing postsecondary program and create age-appropriate experiences for students with ID while they work on meaningful life skills. Postsecondary programming requires community access, vocational opportunities, transportation, and access to hands-on, real-life home management and meal preparation. Postsecondary life-skills students will have access to the OT department's laboratory, which includes a kitchen, laundry, and bedroom space. Further, these students will have opportunities to participate in campus activities such as sporting events, theater, and art activities by partnering with college student mentors.

## Conclusion

Over the last decade, many school districts have looked to alternative programs outside of the high-school setting to deliver postsecondary services. These alternatives included programs in community-based and college-campus settings (Moon et al., 2001). A college campus is an appropriate location to establish a postsecondary program for lifeskills students in this age group. Collaborating with a college or university's OT program

benefits the OTP students by allowing them direct access to fieldwork opportunities they would gain hands-on experience working with special education students, while providing treatment in ADLs and other modalities.

Past studies have supported that providing life-skills instruction and real-life experiences are crucial to creating a successful transition program (Bouck, 2010; Eismann et al., 2017). Designing a postsecondary program on a college campus will provide students who have ID with opportunities to increase their independence in instrumental ADLs, vocation skills, health management, and community involvement. By its nature, OT can provide the skills and training needed to address these valuable occupations (AOTA, 2020). Students will not only participate and benefit from these occupations, but upon completion of the program also have learned basic self-care, health management, and the importance of nutrition and exercise. They will gain invaluable and marketable skills to help them successfully transition into adulthood.

# **APPENDIX A – Learners' Guide for School Administration**



# CAMPUS Program and OT

The C.A.M.P.U.S. Program is a postsecondary educational, community and vocational experience for young adults with documented disabilities who have a desire to achieve independence. The program is run by an occupational therapy practitioner (OTP). The OTP, teachers and administrators, work together to assist students in achieving vocational goals, independence in the community and independent living skills.

## Social Cognitive Theory

Albert Bandura's social cognitive theory (SCT) evolved from social learning theory. The core assumption of SCT, according to Bandura, is that "humans are active information processors and think about the relationship between their behavior and its consequences" (Bandura, 1989, p. 4). Bandura's theory of reciprocal determinism proposes that interactions between behaviors, cognitions, and the environment resulted in learning. The elements of Bandura's theory would be appropriate for a transition program. Students have the opportunity to...

- Participate in weekly vocational opportunities.
- Practice community activities; i.e., travel training, banking, shopping, dining out at restaurants.
- Attend a college campus for functional academics and peer related social activities.

#### Key ingredients to SCT:

- 1. Individuals learn by observing and imitating others.
- 2. Learning is an internal cognitive or mental process that may or may not lead to a behavior.
- 3. Individuals learn about the appropriateness of behaviors, as well as, the consequences.
- 4. Human behavior is directed toward goals (Bandura, 1977).

# Designing a Program using Social Cognitive Theory

Social cognitive theory (SCT) can be used in real life applications to design educational programs for students with intellectual disabilities. Designing a post-secondary program on a college campus based on Bandura's social cognitive theory of reciprocal determinism would incorporate several main elements.



Social Cognitive Theory	Brief description	Real Life Examples:
Main elements (Bandura, 1989)	of main elements	Charles
Person	Knowledge, skills, beliefs,	Charles (18 years) is able to
	rules, attitude are gained	model appropriate behaviors
	through observation and	in social and vocational
	interactions with other	settings from age appropriate
	people. These factors	peers and co-workers.
	influence environment and	
	behavior.	
Environment	Environmental influences	Participating on a college
	shape and control behavior	campus and in the community
	as well as personal	provides Charles the
	experiences.	opportunity to interact with
		peers and co-workers.
Behavior	Behavior is influenced by	Charles' confidence increases.
	personal factors as well as	He develops a positive attitude
	environmental factors.	toward vocational and social
		situations because of the
		successful interactions.
Self-efficacy	A person's belief in their	Charles believes he is able to
	ability to succeed in specific	succeed in vocational and
	situations or accomplish a	social situations.
	task. Belief in yourself.	

References

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84 (2), 191–215. https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), Annals of child development. Six theories of child development (Vol. 6, pp. 1-60). JAI Press

Braungart, M., Braungart, R. & Gramet, P. (2020). Literacy in the adult client population. In Bastable, S., Braungart, M., Gramet, P., Jacobs, K., & Sopczyk, D. (Eds.), *Health professional as educator: Principles of teaching and learning* (2nd ed., pp. 75-126). Jones & Bartlett Learning

## **APPENDIX B – CAMPUS Life**



# **APPENDIX C – Organizational Lessons**

Itinerary	/	Date:	
Boston t	rip for TAP Passes		
1.	8:15 am – Arrive at Train station	Student	is need to bring:
2.	8:30 am – Board train	0 0	wallet/purse MA IDs
3.	9:15 am – Arrive at North Station	0	money
		0	cell phone
4.	Take green line to Charlie Store	0	copy of the itinerary
	0	Budget:	
5.	Get picture taken for TAP Pass		¢ 10 for train and subway
	-	0	\$ 10 for train and subway
6.	10:30 – Walk to Faneuil Hall	0	<u>5 10-15 för luncn</u> Total: \$ 20-25
			lotal. 5 20-25
7.	11:30 – Have lunch in food court area	Dress:	
		~	Comfortable shoes for walking
8.	12:45 pm – Walk back to North Station	0	light jacket
		Ŭ	ight jacket
9.	1:20 pm – Take train home	Do not	bring backpacks
10.	2:15 pm Arrive at station		

# First day reminder



Learner Profile Questionnaire

How best do you learn?

Name: \_\_\_\_\_ Age: \_\_\_\_\_

Everyone has a style of learning that helps them learn more easily. Think about your favorite class from high school. Did you like English class where you read most of the time? Did you prefer history where the teacher told stories? Was art or shop your favorite where you worked with your hands? Maybe you preferred gym class where you were able to move around. Maybe it was a combination.

Circle your preferred learning style. You may choose more than one.



You can apply your preferred styles to your job setting. Let's look at your preferences for the work setting.

Do you prefer to work indoors?	
Do you prefer to work at a desk?	
Do you prefer to work with others?	
Do you prefer to work alone?	
Do you like to work in a noisy place?	
Do you like to work in a quiet place?	
Do you prefer to work outdoors?	
Do you prefer to work in cold weather?	
Do you prefer to work in warm weather?	



Clip art credits:

Angry boy. (2020). http://clipart-library.com/clipart/105053.htm

Class listening. (2020). http://clipart-library.com/clipart/1284117.htm

Girl reading. (2020). http://clipart-library.com/clipart/1184995.htm

Girl running. (2020). http://clipart-library.com/clipart/exercising-treadmillcliparts\_13.htm

Man working. (2020). http://clipart-library.com/clipart/516833.htm Friendly people. (2020). http://clipart-library.com/clipart/486417.htm Shy boy. (2020). http://clipart-library.com/clipart/181415.htm
# **APPENDIX D – Vocational Lessons**

tudent:	Time in:	Time out
ob coach:	Location:	
Grading Scale: 1 – Poor, 2 – Needs improvement, 3 – Fa	ir, 4 – Very good, S	5 – Excellent
Daily:		
Starts work on time and is punctual.		
Dressed and groomed appropriately for the job.		
Demonstrates appropriate language on the job and at bre time.	ak	
Is respectful of supervisors		
Works well with co-workers		
Job Task:		
Able to work on task without supervision.		
Follows through on job task until completion.		
Demonstrates good safety awareness when working arou customers, visitors.	nd	
Demonstrates good safety awareness when using equipme (Please circle) vacuums, dollies, mops, cleaning cart, other	ent:	
Puts equipment and materials away correctly after using	g.	
Follows verbal directions: (Please circle) 1-2 step, 2-3 step, 3-4 step		

# Career Interest Inventory -- Pictorial Version

Learning about yourself is the most important step in your search for a job or career. A Career Interest Inventory helps you relate your interests and abilities to career choices. The following survey will link your career interests to related high school courses.

Step 1: Mark the items within each category that describe you. Step 2: Total the number of items checked for each category.





© by Shasta Twenty-first Century Career Connections

Page 1 of 2

# **Healthy recipes!**

A licensed registered dietitian provides a list of healthy food options for:



- o snacks,
- o breakfast
- o lunch

Easy-to-combine meal preparation tips for "no cook" breakfast, lunch. and simple family dinners.

Healthy tips when shopping at a food pantry along with easy to make recipes.

No cook sample: Healthy Lunch

- Deli sandwiches or tuna salad sandwiches:
  - 2 slices of bread, then add a light layer of mayo or mustard
  - deli meat like turkey, ham or tuna, then add slice of tomato, lettuce
- Pair with baby carrots or celery
- Add hummus for dipping

# Kitchen Scavenger Hunt

Use your phone to take pictures of the following items in your kitchen. Do you know what they are used for? Name the item.



# **APPENDIX F – Survey Questions**

Please rate the following using a 1-5 rating:

1 = not important, 2 = somewhat important, 3 = important, 4 = very important,

5 = extremely important

	Question	Rating scale				
1.	How important were the in-class vocational lessons in assisting with the job site experience?	1	2	3	4	5
2.	How important were the on-campus jobs?	1	2	3	4	5
	• Please state which job was most important?					
3.	How important was the "Prep & Pack" module?	1	2	3	4	5
4.	How important was the "Apartment Living" module?	1	2	3	4	5
5.	Rate the level of importance of the on-campus social activities with your peer mentor?	1	2	3	4	5
6.	How important were the travel training opportunities on campus?	1	2	3	4	5

### **APPENDIX G – Executive Summary**

## **Postsecondary Education**

Postsecondary programs for special education students have been incorporated in public education since 1997 with enactment of the Individuals with Disabilities Education Act ([IDEA], 2004; U.S. Department of Education, 2001). Currently, postsecondary programs for students in life-skills transition programs need to incorporate vocational training, continuing education, independent living opportunities, and community participation as defined by the IDEA (2004). According to the Massachusetts Department of Secondary Education ([MA DESE], 2020), students identified through an individual education plan (IEP) are entitled to receive special education services until their 22nd birthdays. Thus, many life-skills students in postsecondary or transitional programs remain on high school campuses until they turn 22—staying at their high schools for 6 consecutive years. Further, schools that maintain their postsecondary curriculum on a high school campus miss valuable opportunities and deny students access to age-appropriate peer support.

As seniors in general education classes graduate, they will continue their education at institutions of higher learning or enter the workforce. Seniors in a life-skills program who completed 4 years of high school also are looking to advance their skills but often do not have that opportunity. Research has shown that students with intellectual disabilities (ID) have similar goals and aspirations as their neurotypical peers (Gardner et al., 2012; Rogan et al., 2014). Over the last decade, many school districts have searched for alternative programs outside of the high-school setting, such as communitybased and college campus settings, to deliver postsecondary services (Moon et al., 2001). Developing a postsecondary program on a college campus allows students to interact with age-appropriate peers and to work on valuable and meaningful occupations in an adult learning environment.

## **Campus Access Maximizing Participation for Us (CAMPUS) Program**

The focus of the College Access Maximizing Participation for Us (CAMPUS) program is to engage special education students, 18 to 22 years old, in a postsecondary program on a college campus. The CAMPUS program addresses at-risk students with ID and neurological or autism spectrum disorders. This secondary prevention program at the client-centered level provides education and hands-on learning opportunities in vocational training, activities of daily living, instrumental activities of daily living (IADLs), social skills, and community awareness. Its primary goal is to increase students' skills in everyday meaningful occupations. According to the American Occupational Therapy Association's ([AOTA], 2020) Occupational Therapy Practice Framework, 4th edition, occupations are activities performed everyday by individuals, families, and community members to occupy time and provide meaning and purpose to life. Albert Bandura's (1977) social cognitive theory posits that "humans are active information processors and think about the relationship between their behavior and its consequences" (p. 4). To engage in the occupations of work, leisure, and social and family relationships, students need to take active roles in their overall health and well-being. Students enrolled in the CAMPUS program will not only participate in valuable occupations but also, upon completion, will have learned basic self-care needs, health management, and the

importance of nutrition and exercise.

The second goal of the CAMPUS program is to establish a relationship with the occupational therapy (OT) department at a local community college or university. This collaboration will provide postsecondary life-skills students with access to a classroom and laboratory that includes a kitchen, laundry, and bedroom space. The collaboration will also create Level I fieldwork placements for OT, OT assistant, and OT practitioner (OTP) students because the postsecondary program is run by a school-based occupational therapist. In addition, the postsecondary life-skills students will have opportunities to participate in campus activities, such as sporting events, theater, and art activities by partnering with college student mentors.

### The Program Model

The CAMPUS program runs Monday through Friday and follows the public school academic year calendar. Staff members involved in the program are employees of a public school district in Massachusetts and include the author, paraprofessionals, a special education teacher, and a behavior specialist. Other related-service providers may be involved based on each student's IEP. Six modules with lessons plans have been created for students to engage in learning objectives set by the MA DESE for transition planning. The modules include vocational, nutrition, community skills, organizational skills, IADLs, and current events education and training. Each week, students participate for 2 days at a designated job site for community-service learning opportunities, 2 half-days for IADL skills training and nutrition education in the OT laboratory, 2 half-days for classroom discussions focusing on organizational skill building and current events, and 1 day for community skills. Community skills include travel training on local public transportation and participation in campus-life activities.

## **Role of Occupational Therapy**

The evidence-based literature supported that providing all the necessary components in the transition plan, under the recommendations set forth by the IDEA (2004), has posed challenges for many school districts (Eismann et al., 2017; Gardner et al., 2012; Rose et al., 2005). Often, for OTPs, involvement at the high school level and especially at the transition level—is minimal. That is, despite their professional training and distinct abilities to assess and implement client-centered services for students with disabilities at the transition level, few OTPs have been involved in the transition process (Berg et al., 2017; Eismann et al., 2017; Kardos & White, 2005; Pierce et al., 2020). According to Eismann (2017), a descriptive analysis showed that only 7.5% of students with ID received OT services during the transition-to-adulthood years. Those OTPs provided evidence-based interventions through the students' participation in meaningful occupations such as work, community, leisure, and life skills. The literature also stated that transition services should be provided in the least restrictive environment with age-appropriate services (Gardner et al., 2012; Rose et al., 2005).

## **Occupational Therapy Fieldwork**

The AOTA (2016) outlined the purpose of fieldwork education as to "propel each generation of occupational therapy practitioners from the role of student to that of practitioner" (p. 1). The evidence-based literature was limited regarding OTPs working

with students with ID who participate in a postsecondary program on a college campus. Hence, there also was limited evidence-based literature on the ability of OT fieldwork educators to provide supervision to OTP students directly on the college campus. Creating a transition program on a college campus offers students with ID and neurological or autism spectrum disorders the opportunity to interact and develop social skills with age-related peers. School-based OTPs can bridge that current gap by creating innovative transition programs through partnerships with key stakeholders, such as community businesses, entry-level OT programs, and nonprofit organizations. Partnering with a local college or university that has an OT program affords the university's OTP students an opportunity to begin fieldwork practice directly on campus while working with students with ID. Graduating competent entry-level OT students is the culmination of course work taught in the academic program. The learning experience for students is provided through the fieldwork placement and through the relationship developed between the fieldwork educator and student.

#### **Stakeholder Engagement**

School districts are mandated to provide postsecondary programming according to the MA DESE (2015). Research has shown that keeping students in a high-school lifeskills program after senior year is not as effective as programs that move the students into community or college environments (Moon et al., 2001). Additionally, OT programs are currently in need of fieldwork placements. Having a school-based OT on a college campus with the postsecondary students is a "win–win" situation for both the college and the high-school administrations. The director of the college or university's OT department has a vested interest because new opportunities for fieldwork placements will be available for OTP students. Running a full transition program under the special education department eliminates costly out-of-district placements for post-high-school students in public school districts.

## Conclusion

A postsecondary program on a college campus is an appropriate location for lifeskills students in this age group. Among the benefits of establishing such a program and collaborating with a college or university that has an OT program is that it allows the university's OTP students direct access to fieldwork opportunities. The OTP students would gain hands-on experience working on IADLs and other treatment modalities with special education students. Prior research supported that providing life-skills instruction and real-life experiences are crucial to creating a successful transition program (Bouck, 2010; Eismann et al., 2017). Designing a postsecondary program on a college campus will provide these transition students the opportunity to increase their independence in IADLs, vocational, health management, and community involvement. Occupational therapy can provide the skills and training needed to address these valuable occupations (AOTA, 2020). A permanent location on a college campus would allow the postsecondary program to provide valuable, age-appropriate life experiences for students with ID and neurological or autism spectrum disorders.

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# **APPENDIX H – Fact Sheet**



# CAMPUS College Access Maximizing Participation for Us Sharon McGrath, OT, OTR, B.S., M.Ed.

# The Problem: Special education students are in need of a home base for a post-secondary program

- The existing high school post-secondary program located in Eastern Massachusetts lacks an adequate facility to address independent living skills such as home management and meal preparation.
- The lack of a home base does not allow students and staff a place to keep belongings or work on long term projects.
- Students with intellectual disabilities (ID) have limited opportunities to interact with age related peers if transition programs are maintained on a high school campus (Rogan et al., 2014; Gardner et al., 2012).
- Only 35% of young adults with ID obtain paid employment within 8 years of exiting high school; the majority of employment in unskilled labor jobs (Gilson, Carter, 2016; Smith et al., 2017; Taylor & Seltzer, 2011).
- · Occupational therapy practitioners (OTPs) have a limited role in the transition process.

#### Why is this important?

Since 1997 the Individuals with Disabilities Education Act (IDEA) has mandated postsecondary (transition) programs for special education students (DOE, 2001).

**Transition Services**: According to the IDEA, transition to adulthood begins when a student turns age 14. Post-secondary programs for students in life skill transition programs need to incorporate vocational training, continuing education, independent living opportunities and community participation. The transition plan is included in the student's individual education plan (IEP). Students are entitled to receive special education services in Massachusetts public schools until their 22<sup>nd</sup> birthday (Mass DESE, 2020).

<u>The IEP team includes</u>: the student, parents, special education teachers, related service providers and adult service agencies; such as the Department of Developmental Services.

#### Occupational Therapy (OT) & Fieldwork

The American Occupational Therapy Association (AOTA) outlines the purpose of fieldwork education as to "propel each generation of occupational therapy practitioners from the role of student to that of practitioner" (AOTA, 2016, p. 1).

#### Fieldwork in high demand



School-based OTPs can bridge the gap to create innovative transition programs through partnerships with key stakeholders such as:

Community businesses <> Entry-level OT programs Non-profit organizations

## CAMPUS and OT

The CAMPUS Program is a post-secondary educational, community and vocational experience for young adults with documented disabilities who have a desire to achieve independence. The program is run by a school-based occupational therapy practitioner (OTP). The OTP, teachers and administrators, work together to assist students in achieving vocational goals, independence in the community and independent living skills.

#### A word about OT & work...

Work provides:

- Sense of self-worth
- Purpose & independence
- An environment to build relationships

Students have the opportunity to ...

- Participate in weekly vocational opportunities.
  - Practice community activities; i.e., travel training, banking, shopping, dining out at restaurants.
- Attend a college campus for functional academics, ADLs, and peer related social activities.

#### OTPs provide:

- Effective job development intervention strategies for students with ID
- Essential task analysis
- Adaptations to the work the environment

The goal of the CAMPUS program is to establish a relationship with the OT department at a local community college or university.

CAMPUS students will have access to:

- > academic classroom laboratory that includes > Fieldwork placement directly on a kitchen, laundry and bedroom space
- participation in campus activities such as sporting events, theater, and art activities
- peer mentoring with college students
- OT students will have access to:
- campus
- Opportunities to act as peer mentors
- Co-lead groups with school-based
- OTP

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# CURRICULUM VITAE





