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Congratulations to:

Nina du Toit, Ph.D., Cape Peninsula University of Technology
JPED 2018 Research Reviewer of the Year

and

Anne Osowski, College of Charleston
JPED 2018 Practice Brief Reviewer of the Year
Students with Intellectual and Developmental Disabilities in Postsecondary Education: From the Editor

Federal legislation (e.g., Higher Education Opportunity Act of 2008, PL 110-315), program support (e.g., Transition and Postsecondary Programs for Students with Intellectual Disability [TPSID], United States Department of Education), and national organizations (e.g., The Arc, Think College) have made it possible for individuals with intellectual disabilities (ID) to participate in and benefit from postsecondary education (Kleinert, Jones, Sheppard-Jones, Harp, & Harrison, 2012; Newman, Wagner, Cameto, Knokey, & Shaver, 2010). Until recently, what was merely a dream for many individuals with intellectual and developmental disabilities (IDD), and their parents, now students with ID have access to higher education in nearly every state in the nation.

The Association on Higher Education and Disability’s (Thompson, Weir, & Ashmore, 2010) policy statement on post secondary education for students with ID, and how these students have the potential to intersect with disability services offices, provides facts for postsecondary institutions, and key disability services issues.

Numerous programs for students with intellectual disabilities currently exist in a variety of postsecondary educational settings. While Disability Services professionals do not usually operate such programs, we are in a unique position professionally to inform institutional decisions to design and implement programs that are welcoming and inclusive for students with ID. Where such programs already exist on a campus, Disability Service professionals can work with the program staff to determine how students with ID can access accommodations and other resources of their offices. AHEAD, in partnership with the Institute for Community Inclusion and ThinkCollege.net, will continue to provide its members with guidance on how to support and facilitate the full participation of students with ID in postsecondary educational settings. (p. 1)

This special issue of the Journal of Postsecondary Education and Disability (JPED) focuses on students with IDD and their participation in higher education. The lead article examines the use of a coaching model to support the academic success and social inclusion of students with ID in community and technical college settings. Xueqin Qian, David Johnson, and Jean Echternacht (University of Minnesota-Twin Cities) and Emily Clary (Minnesota Communities Caring for Children), in a study funded by the U.S. Department of Education, found that students considered the two most valuable components of a coaching program to be the development of a positive student-coach relationship, and the “open door” policy in which students could drop in on their coaches. This flexibility in scheduling fostered rapport building between students and their coaches and allowed students to receive individualized supports as needed. In the next article, Andrew Scheef (University of Idaho), Brenda Barrio, Marcus Poppen, Don McMahon, and Darcy Miller (Washington State University) share a study on exploring barriers for facilitating work experience opportunities for students with ID who were enrolled in postsecondary education programs. In a sequential mixed methods study, the authors identified common barriers for these students’ paid work experiences including transportation issues, employer perceptions of the abilities of people with disabilities, inadequate number of staff hours to support students in the workplace, and finding time in the students’ schedule.

In the third article, a study on inclusive community service among college students with and without ID is presented. Alexandra Manikas, Erik Carter, and Jennifer Bumble (Vanderbilt University) share how students with and without ID worked together to jointly plan a community service project, carry it out, and reflect upon their experiences. The authors present ways for structured, inclusive service experiences to be incorporated more fully into the collegiate experience for students with ID. In the next article, Douglas Allen Roberts, Matthew Herring, Andrew Roach (Georgia State University) and Anthony Plotner (University of South Carolina) share their research on the physical activity in inclusive postsecondary education for students with ID. Since people with ID are more than twice as likely to be obese than people without ID, these authors examine the inclusion of fitness and exercise components in the context of inclusive postsecondary education programs within the United States.

The fifth article examines promoting employee handbook comprehension for postsecondary students with ID and Autism Spectrum Disorders (ASD).
Stephanie Devine, Joshua Baker, Mona Nasir-Tuck, and Ryan Wennerlind (University of Nevada, Las Vegas) investigated the effects of an adapted employee handbook paired with systematic prompting on text comprehension with postsecondary students with mild to moderate ID and ASD. The results demonstrated a significant increase in the ability of students to answer comprehension questions based on an adapted employee handbook. In the final research article, Kimberly Miller, Stuart Schleien, Adrienne White, and Lalenja Harrington (University of North Carolina Greensboro) explored parent perspectives on the outcomes of an inclusive postsecondary education experience for students with IDD. Their data identified several themes including desired outcomes (e.g., development of independent living, career, and social skills, inclusion) and perceived outcomes (e.g., increased levels of social involvement, perceptions of self, and independent living skills).

The issue concludes with two practice briefs, the first on teaching people with an ID about their disabilities. Natasha Spassiani (Edinburgh Napier University, United Kingdom) introduces an innovative curriculum designed to provide students with an ID with a high quality postsecondary education that may better equip them when transitioning from the education sector to employment and independent living. In the second practice brief, Joanne Caniglia and Yvonne Michali (Kent State University) describe a postsecondary transition program for students with ID that incorporates financial literacy content taught through the lens of self-determination theory.

In this issue we also recognize the contributions of JPED reviewers to the postsecondary disability services/studies literature. The contributions of these professional educators to the literature are highly valued and much appreciated. Nina du Toit, from Cape Peninsula University of Technology (South Africa) was recognized at the AHEAD conference as the 2018 Research Review Board Reviewer of the Year; and, Anne Osowski, College of Charleston, was recognized as the 2018 Practice Brief Review Board Reviewer of the Year. Congratulations!

The editorial team and review boards associated with the JPED are proud to provide this special issue on IDD in postsecondary education with the intent that it will inform the disability services community as they work this this unique population of students on our campuses.

Roger D. Wessel, Ph.D.
Executive Editor

References
The Use of a Coaching Model to Support the Academic Success and Social Inclusion of Students with Intellectual Disabilities in Community and Technical College Settings

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Jean K. Echternacht¹

Abstract

The enrollment of students with intellectual disabilities in postsecondary education has increased steadily over the past three decades. This growth has been catalyzed by federal legislation (i.e., the Higher Education Opportunity Act of 2008), advocacy, public acknowledgment that individuals with intellectual disabilities have the capacity to successfully participate in postsecondary education programs, and changing parental expectations. Although many colleges and universities have mentoring programs, few studies have explored the influence of a formal mentoring approach utilizing paid professional staff as coaches. This paper presents findings from qualitative interviews with 39 students with intellectual disabilities who participated in a five-year demonstration project entitled Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSID). This project, rooted in the Check & Connect mentoring model, was conducted in partnership with the Disability Services offices of two community and technical colleges in the Upper Midwest. Students considered the two most valuable components of the coaching program to be the development of a positive student-coach relationship and the “open door” policy in which students could drop in on their coaches without an appointment. This flexibility in scheduling fostered rapport building between students and their coaches and allowed students to receive individualized supports as needed. According to the students, the positive aspects of the program included their improved academic success and increased academic motivation and engagement. Several recommendations with implications for future coaching models and strategies are also provided.

Keywords: Coaching, intellectual disability, postsecondary education

The nature of work in our society is undergoing dramatic changes. For students with and without disabilities, obtaining a college degree or an industry-recognized credential is necessary to obtain employment that affords the individual future career advancement and a livable wage (National Research Center for Career and Technical Education, n.d.). It is estimated that by 2020, 65% of all jobs will require some postsecondary education (PSE) and training, up from 28% in 1973 (Carnevale, Smith, & Strohl, 2013). Education and healthcare, some of the fastest growing occupations, have the highest demand for postsecondary education, with over 80% of their workers currently required to have formal PSE and training for their positions.

PSE institutions are ideal places to provide students with intellectual disabilities (ID) with opportunities to develop skills needed in the competitive job market (Grigal, Weir, Hart, & Opsal, 2013; Smith, Grigal, & Sulewski, 2012). Migliore, Butterworth, and Hart (2009) found that youth who participated in both PSE and received vocational rehabilitation (VR) services were 26% more likely to exit PSE with paid jobs than those who only received VR services. PSE is linked not only to improved employment opportunities but also to better health outcomes, better social networking skills, increased independence, and improved self-advocacy skills (Hart, Grigal, Sax, Martinez, & Will, 2006; Thoma et al., 2011). One possible explanation as to why PSE improves employment outcomes for students with ID is that college experiences expand students’ social networks, which often leads to increased employment opportunities (Hart et al., 2006; Hughson, Moodie, & Uditsky, 2006).

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Over the past two decades, there has been growing interest in connecting students with ID to PSE opportunities. A 2010 study revealed that the number of students with ID who reported ever having enrolled in PSE increased 20% over fifteen years, from 8% in 1990 to 28% in 2005 (Newman, Wagner, Cameo, Knokey, & Shaver, 2010). The increasing enrollment of students with ID in PSE has been attributed to many factors: increased professional and public awareness and advocacy regarding the benefits of PSE for students with ID participating in PSE; greater acceptance that students with ID have the capacity to successfully participate in PSE programs; the influence of federal legislation (e.g., Americans with Disabilities Act, Higher Education Opportunity Act) which supports students access to and participation in PSE; and raised expectations from parents for their child’s participation in PSE (Hart et al., 2006; Thoma et al., 2011). Despite increased enrollment, students with ID continue to experience some of the poorest PSE outcomes and the majority of students with ID do not complete their degrees (Sanford et al., 2011).

Challenges Faced by Students with Intellectual Disabilities in College

Although increasing numbers of individuals with ID are enrolling in PSE, the extent to which they access regular academic courses, participate in social activities and events on campus with students without disabilities, and successfully complete programs of study and graduate with a meaningful exit credential (i.e., degree or certificate) are not as well understood. When students with ID transition from high school to college, they are shifting from an environment in which services and supports are organized and managed by schools on behalf of students to an environment in which students must assume the responsibility for their success by seeking out the services and supports they need on their own. Students with ID are often unprepared for this dramatic change. As a result, they may experience significant academic difficulty, failure, and social isolation in college, often resulting in them dropping out. In one study, Cherif, Adams, Movahedzadeh, Martyn, and Dunning (2014) interviewed 190 faculty members from two- and four-year colleges about why students with and without disabilities fail courses or drop out of college. Students’ lack of basic foundational academic skills (e.g., mathematics, writing, reading comprehension), inability to manage their academic workload and maintain effective study habits, and inability to meet deadlines were cited as the primary reasons that students dropped out.

Additionally, many students with ID may lack specific skills essential for navigating the PSE environment, such as social, communication, and decision-making skills. These skills are often referred to as self-determination (SD) skills. Wehmeyer and Little (2005) defined SD behavior as “volitional actions that enable one to act as the primary causal agent in one’s life and to maintain or improve one’s quality of life” (p. 117). This contemporary view of self-determination has evolved from earlier research and theory development on motivation and self-determination (Deci & Ryan, 1985, 1987). This research stresses that individuals strive to develop a sense of autonomy and control over their lives and this is realized through the choices and decisions one has control over to self-direct their life experiences. This view also recognizes that there are social, cultural, and environmental factors that undermine an individual’s autonomy and control thus, inhibiting their sense of initiative, competence, and confidence in acting on their own volition (Deci & Ryan, 1987). Historically, individuals with ID have been viewed as limited in their capacity to exercise choice and control over their lives. Consequently, throughout their lives parents, teachers and other professionals have assumed the role of making choices and decisions on their behalf. Postsecondary education environments, however, require that all students, including students with ID assume primary responsibility for self-directing their college experience. One of the goals of the TPSID project was to have the coaches work with the students in assuming higher levels of autonomy in making decisions and choices regarding their academic programs, types of social engagement at the colleges, community living arrangements, and other aspects of college life.

Examples of SD-related skills are goal-setting, problem solving, self-regulation, and self-advocacy. Research has shown that these skills are associated with positive post-school outcomes but are often lacking in students with disabilities (Chambers et al., 2007; Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015; Wehmeyer & Palmer, 2003). Such skills are key to ensuring that students receive the services and supports they need to successfully participate in their programs of study and attain a degree or certificate (Izzo & Lamb, 2002; Shogren & Plotner, 2012). Without these SD-related skills, the requirements and demands of the PSE environment challenge students with disabilities’ ability successfully manage and complete their programs of study.

Many students with ID not only face academic challenges when enrolled at PSE institutions, but also face administrative and systemic barriers. Thoma (2013) gathered information from program coordina-
tors who managed PSE programs for students with ID. In her research, program coordinators and staff described challenges in navigating university policies and the different organizational and cultural environments of the systems that support students with ID. Other barriers identified included: PSE programs for students with ID tend to be located in remote and isolated areas on campus; PSE programs for students with ID are difficult to sustain; and PSE administrators generally fail to buy into the value of these programs and to officially recognize students with ID as traditional students (Thoma, 2013). Researchers also noted the difficulty of providing holistic services that meet the diverse needs and capacities of each student (Hart et al., 2006; Thoma, 2013). Many of these systems-level barriers prevent students with ID from accessing PSE resources and integrating successfully into the campus community.

Coaching and Mentoring Programs in Postsecondary Settings

Despite limited research on the use of coaches (also referred to as mentors in some studies) to support students with disabilities in PSE settings, coaching has been a common support service strategy for students with and without disabilities in college and university settings (Ryan, 2014). Previous studies have revealed that mentoring programs for students with disabilities in community and technical college settings are associated with a variety of benefits (Blumberg & Daley, 2009; Dillon, 2007; Jones & Goble, 2012; Quaye & Harper, 2014). For example, the Career and Community Studies program at the College of New Jersey supplemented program staffing with peer coaches who provided social and academic support for students with ID. Coaches were recruited from student associations (e.g., Best Buddies, sororities, Sports Club) and undergraduate and graduate classes, who attended classes and social activities alongside their peer student mentees with ID (Blumberg & Daley, 2009).

Studies have documented benefits of mentoring programs for both mentors and mentees. Baier, Markman, and Pernice-Duca (2016) found that freshmen perceived mentoring as supportive and positively associated with their intent to finish college. Although participants in this study were students without disabilities, it is likely that providing mentoring to students with ID will also increase retention and academic/social inclusion. Many mentors supporting students with ID in PSE settings have experienced satisfying relationships with and an increased belief in the capabilities of their mentees (Blumberg & Daley, 2009). Jones and Goble (2012) identified the following strategies for creating effective mentoring programs on university campuses for students with ID: (1) develop effective systems for communication among support services offices, faculty members, mentors, and students; (2) maintain high expectations for students; (3) encourage student independence; and (4) prioritize students’ social participation.

The Study Context and Goals

The present study was conducted as part of a five-year, federally-funded Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSID) demonstration project. Primary objectives of this project included increasing student participation in regular college courses as well as certificate and degree programs (U.S. Department of Education, 2011).

The current demonstration project was conducted in partnership with the Disability Service (DS) offices on two rural community and technical colleges in the Upper Midwest. Each college is located in a community of approximately 20,000 individuals. Both sites offer a broad range of 2-year associate degrees and certificate programs in technical fields such as manufacturing, construction, healthcare, automotive, and other trades. In addition, both colleges offer extracurricular activities. Neither school offers on-campus housing. The enrollment at each college is approximately 6,000 students, including students with and without disabilities. Roughly half of the students at each college enroll full-time. Students of color comprise 10%-13% of the student population at each college. Both colleges have more than twenty years of experience providing educational and vocational training opportunities for students with ID. Since the mid-1980s, both colleges have operated Occupational Skills Programs, which are nine-month programs that provide an opportunity for students with ID to participate in technical education programs, learn functional adult living skills, and engage in community-based employment opportunities.

The DS office at each of the community and technical college settings served as the first point of contact for students with ID. While it was not the responsibility of the DS offices to operate the coaching project, DS professionals served a key role in consulting with project coaches on institutional policies and procedures concerning project implementation, and in working with the coaches in determining how students can access accommodations and other resources of their office. Students most often received DS assistance in determining specific accommodations when attending classes (e.g., recording lectures, allowing additional time to complete in class assign-
ments, opting for oral exams, etc.) and receiving DS services outside of class (e.g., academic tutoring, preparing course materials in alternate formats, testing in a room with limited distractions, etc.).

Check and Connect Mentoring Model

The Check and Connect (C&C) mentoring model was the primary intervention implemented in this TP-SID project. The underlying theory and strategies of this model are consistent with an individual support model and person-centered planning (Grigal, Dwyre, & Davis, 2006; Kaehne & Beyer, 2014), in which services are based on students’ individual needs. C&C is a relationship-based, data-driven mentoring program designed to assist students with and without disabilities with relationship building, problem-solving, and capacity building, rooted in the resilience framework (Christenson, Stout, & Pohl, 2012). The primary role of the C&C mentor is to regularly “check” on student progress and, as needed, “connect” them with needed support services and assistance. Each C&C coach worked with a caseload of 25-30 students concurrently. C&C met the evidence criteria of the U.S. Department of Education’s What Works Clearinghouse as a mentoring intervention that positively affects high school students’ persistence in school (What works Clearing House, 2006, 2015). Several efficacy trials of C&C for high school students have shown positive effects on student attendance, academic performance, and persistence in school (Maynard, Kjellstrand, & Thompson, 2014; Sinclair, Christenson, Evelo, & Hurley, 1998; Sinclair, Christenson, & Thurlow, 2005). C&C has been widely adopted across the country at the state and local levels.

Recently, C&C has been implemented in several postsecondary settings. A recent program implemented by Regional Opportunity Initiatives (2016) in collaboration with Ivy Tech Community College in Bloomington, Indiana used C&C coaches from a community college to support at-risk students and prepare them for pathways into technical certifications, associate degrees, and other PSE programs. In another study, Johnson and Stout (2011) implemented the C&C model in two community and technical colleges in Minnesota and Kentucky. Participants in this study were students with disabilities and other students identified as being at risk of not completing their two-year program. Results of the study found that students who received the C&C intervention passed more courses, maintained a higher GPA, and experienced better retention than students in the comparison group.

Coaches in the project were three full-time, paid professional staff, funded by the TPSID grant. These coaches received training on the theories underlying C&C, the concept of student engagement, how to implement C&C, and how to align the project coaching services with DS at the two community and technical colleges. Trainers from the University of Minnesota provided guidance on how to use the C&C monitoring form to track student progress. They also instructed coaches on how to develop an individualized program plan with problem-solving strategies based on data collected from the student’s data monitoring form. The data monitoring form is used in all C&C applications to track and record students’ class attendance, academic progress, challenges they are experiencing academically and socially, and specific intervention plans to address the challenges. Trainers embedded the principles of universal design (Scott, McGuire, & Foley, 2003), SD (Chambers et al., 2007) and person-centered planning (Neubert & Redd, 2008; O’Brien & O’Brien, 2000) into the program. Although students’ needs varied, overall, the services focused on the following: participation in regular courses, social inclusion, independent living, and career exploration and post-program employment (Johnson & Echternight, 2016). Two supervisors, one on each campus, provided ongoing supervision for the coaches.

Purpose of the Present Study

Most studies of the experiences of students with disabilities in PSE settings have used data from surveys and interviews with PSE faculty, staff, and administrators instead of data gathered from students directly (Thoma et al., 2011). This qualitative study, based on interviews with students with ID, presents student perceptions of how mentoring influenced their PSE experiences. Specifically, it addressed the following questions:

1. What were the key components of the mentoring services received?
2. What program characteristics were valued the most by the students?
3. What were the perceived benefits of the coaching services?

Method

This was a phenomenological qualitative study based on interviews of students with ID enrolled in two community and technical colleges. The phenomenological research aims to understand a phenomenon as it is experienced by those most directly involved (Creswell, 2009). In this study, the phenomenon of interest is the experiences of PSE students with ID who participated in a coaching program.
Participants

The TPSID model demonstration project limited participation to students with an intellectual disability (ID), including students with Autism Spectrum Disorders (ASD). The American Association on Intellectual and Developmental Disabilities (AAIDD) defined intellectual disability as characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills, and originates before the age of 18 (Schalock et al., 2010). Documentation of the disability was obtained through prior school records, referral from a community service agency that has completed a disability determination (e.g., vocational rehabilitation Social Security Administration), or documented intellectual disability by a doctor or psychologist. A total of 39 students with ID and ASD from the two community and technical colleges sites participated in the study (19 males, 20 females). The average age of the study participants was 21 years. Participants in the present study were primarily certificate-seeking students with ID, with approximately 10 students (26%) who were enrolled in degree programs, with over 90% being Caucasian. All participants lived off campus since neither college provided on-campus living.

These students worked with their coaches for an average of nine months, with student-coach relationships ranging from 2-30 months in duration. Each coach had extensive experience working with individuals with disabilities: one had previously helped individuals transition from prison to communities, one had been a vocational rehabilitation counselor, and one had worked as a social worker.

The recruitment process for the interviews about the TPSID program had two phases. First, the researchers contacted three C&C coaches and explained the purpose of the study. Second, three C&C coaches shared information about the study with their mentees. Approximately 100 students who were enrolled in the TPSID project and were asked to participate. Students were told that researchers from a university were interested in learning about their experiences in the C&C program and those who were interested volunteered for the study. Two researchers traveled to the colleges and interviewed the students. A total of 39 students in the TPSID program at the time of the interview (2013) volunteered to participate in the interviews.

Data Collection

Two researchers with a background in qualitative research conducted the student interviews. An interview protocol was developed that included seven sections:

1. Background (e.g., “How long have you been at this college?”);
2. Experience with coaches (e.g., “What do you do with your coach?”);
3. Academic (e.g., “How are you doing in your classes?”);
4. Independent living (“Where are you currently living?”);
5. Social engagement (e.g., “Do you participate in social activities on campus?”);
6. Vocational (“Where would you like to work when you finish with school?”); and
7. Conclusion (“Do you have any other comments about your experience in C&C?”).

All interviews were recorded and later transcribed.

Data Analysis Procedure

To assess student experiences with the program, the researchers engaged in an inductive analysis process, moving from open coding to axial coding and then selective coding (Gilbert, 2008). Interviews were coded and discussed by the researchers. The first and second author coded 80% of the interviews side-by-side and discussed discrepancies as they arose until a consensus was reached. During open coding, transcribed texts were categorized into: (1) background information about students, and (2) student experiences with the mentoring program. Then, axial coding across data was conducted and sub-categories were identified based on the transcriptions (e.g., “quality of relationship,” “program features”). Finally, themes were developed based on the sub-categories and some categories were merged. For example, the categories “multi-tiered services” and “individualized services” were combined since both involved tailoring services to meet students’ unique needs. Through this selective coding process, relationships across datasets were identified and refined into themed concepts.

Results

Question 1: What Were the Key Components of the Coaching Services Received?

Students were asked what they discussed with their coaches during their coaching sessions. Analysis of the student interviews revealed several themes including academic support, social participation, career guidance, community living, and other supports. Table 1 summarizes the results, showing the most common types of support provided by the coaches. “Number of students” refers to the number of students who reported receiving specific types of services, and “Number of times mentioned” refers to how many
times a service area was coded. More quotes from students supporting all themes were summarized in Table 2.

**Academic support.** Table 1 shows that academic support was mentioned by 31 students (79%) and coded 82 times. Thus, it was by far the most common topic that students discussed with their coaches. Most significantly, several students indicated that their coaches worked with them to help them avoid dropping classes when they were overwhelmed with their assignments, improve their grades, and manage their academic workloads. For example, Adam met with his coach every other week for support and was enrolled in the degree program. He was receiving a scholarship to attend college, was renting an apartment with his brother, and worked part-time to make ends meet. Pursuing a career as a teacher, he recalled: “I had a problem once when I wasn’t doing too well in class, and she [coach] helped me work with an instructor to pull my grade back up...and I passed.”

Many students noted that their coaches taught them study and test-taking strategies and explained complicated or confusing assignments. The coaches often consulted with DS staff to identify specific accommodations and supports that would benefit individual students. Students also shared that their coaches helped them focus and stay on track with their schoolwork, provided constructive feedback, and held them accountable for completing their work. Several students mentioned that their coaches taught them how to check their grades online and stay up-to-date with their class assignments.

**Social participation.** Students frequently mentioned that meetings with their coaches focused on their social participation at the college. Several students indicated that their C&C coaches helped them expand their social networks and friendships across campus. Mark, a student in the degree program who lived at home with his parents, aspired to pursue a career in music. He said: “Check and Connect actually has gotten me into different types of organizations. They’ve gotten me into TRIO [a student support program on campus]...Then also again with the help of Check and Connect they have helped me become a member of Phi Theta Kappa.”

Many students reported that the TPSID Club was their primary or only social outlet on campus. The TPSID Club was part of the demonstration project in which weekly events, such as movies or game nights, were organized by students and/or coaches. It provided additional opportunities for students with ID to socialize outside of their classes. Several students indicated that the club allowed them to foster friendships and/or that it promoted confidence and leadership skills. Mary, a student who was living with her parents while attending the certificate program, said that her goal was to eventually move into a more independent living situation with a friend. She shared that in the TPSID Club: “You make a lot of friends and find friends that like what you like to do.” Students also reported that their coaches helped them become involved in social and recreational activities at the college with students without disabilities (see Table 2).

**Career guidance.** Students varied in the amount of career guidance they received from their coaches. Some students mentioned that their coaches checked in with them about their current employment and future career plans, but other students indicated that their coaches provided little to no career guidance because VR staff provided that support. Other students were encouraged by their coaches to seek career planning advice from college career guidance and counseling staff.

**Community living.** Since both of the community and technical college sites did not provide housing on campus, most students lived at home with their parents or lived in independent or supervised living arrangements near campus. Students discussed various aspects of community living with their coaches. Several students worked with their coaches to set up a community-based living situation during or after their participation in the program. Others counted on their coaches to help them resolve conflicts with their roommates, property owners, or for help to manage other community living-related issues. Nancy, a student in the degree program who is a certificate program graduate, said that she has three roommates and has been living with them for several years. She shared: “There were a couple of times where me and my roommates were having a fight, and then I went to [coach] and she helped take care of that.”

**Other supports.** Students received supports from their C&C coaches on a variety of other topics as well, including navigating registration, financial aid, and email access, and for a few students, dealing with anxiety, depression, or anger issues. For example, Peter, a student participating in the certificate program, lived with his father who was ill and commuted one hour to campus. He confided:

I talked to [coach] about my depression, because I have some thoughts of things that I wasn’t really happy about...She helped me out and got me into counseling again just to deal with it. She really helped me out a lot...I’ve been doing way better.

In addition to academic strategies and supports, stu-
Students relayed that their coaches taught them time management skills, organization skills, budgeting and financial literacy, and problem-solving skills, referred to in Table 1 as “soft skills.” Jeff is a student from out of state who was pursuing two degrees at the college. With financial support from his parents, he lived independently in an apartment near campus. He reflected on how his coach supported him:

She [coach] tries to make sure I’m organized, which is an ever present battle. I have ADHD and dyslexia and organization is not my strong suit. She’s trying to make sure I’m doing my homework. I don’t really need someone to do that part, but you know but someone on my butt does occasionally help. She makes sure I’m not getting overwhelmed that’s a help. Sometimes she just listens to me vent, that’s a help. Then sometimes she give constructive criticism, which annoys me, but it’s a help.

A few students needed extra support for the transition into college, so the coaches provided a welcoming space for them to acclimate to the new environment as they struggled to separate from their parents and begin living on their own. Several parents were, however, actively involved with their adult child with ID during the full course of their participation in college. Student consent for parental involvement was promoted by the coaches, and for some students this provided an important level of encouragement as well as support to meet their financial and housing needs.

Research Question 2: What Program Characteristics were Valued the Most by Students?

Students were asked to identify and discuss the specific TPSID program characteristics and components that they most valued during their PSE experience. Students stated that (1) the flexible meeting times and open-door policy and (2) the relationship-based approach were the most valuable components of the program.

Flexible meeting times and open-door policy. Approximately 45% of the students indicated that they sought out their coaches for support when they needed help. Although students in the program typically had a scheduled weekly or biweekly meeting time with their coaches, many students accessed their coaches on an as-needed or informal, drop-in basis. The coaches’ “open door” policy was considered an asset by many of the students in the program. Eva, a student in the certificate program, was an English Language Learner who was working to gain citizenship in the United States during her time in the program. She was also pursuing her Certified Nursing Assistant license, and explained the value of the flexible meeting schedule:

My favorite part of Check and Connect is when my coach tutors me when I have a hard time understanding questions. I just stop by his office because he has office hours anytime. He is not like regular teachers that has a class. I could just stop by anytime, and he would just help me with my question. If he does not understand the question, he looks for someone else to help me. He is a great guy.

Relationship-based approach. Forty percent of the students interviewed shared positive feedback about their relationship with their coach. The majority of the student comments focused on their coaches’ accessibility and responsiveness. Students also noted that their coaches would go out of their way to answer questions and help them understand challenging or confusing academic material and assignments. Several students commented that they felt safe and comfortable with their coach and that they considered them a trustworthy support on campus. Hayley, a student in the accounting degree program who aspired to be a bookkeeper, lives with her son and husband and explained how her coach provided her the necessary support to stay connected to the school while she juggled many responsibilities:

She was able to calm me down and keep me from dropping some classes when I panicked. Turns out I was getting a high C in them anyways even with the lack of turning some of the first few things in because I had no idea what was going on. I would not have come here if it weren’t for this program. I did not know it existed before. It may have, but if I did not have a place to go that I felt safe or to ask questions where people understood that I am a little bit different from everybody else, I would not be here.

Research Question 3: What did Students Report as the Overall Benefits of the Program?

Students were also asked in what ways the help they received from their coaches changed their lives. Students shared how their academic engagement and other areas of their lives were improved by their relationship with their coach.

Improved academic performance. The greatest outcome of the PSE program, according to the students, was the improvement in their academic performance. Lilly, a student in the degree program, has
two children and shared how difficult it can be as a parent to find time to focus on her schoolwork. She shared: “Being able to sit down and work on things and think it through and be able to have someone to bounce those ideas off of and get feedback helped everything go so much more smoothly.” Several students noted that their coaches helped them to avoid failing their classes. Other students stated that their school workloads were more manageable and easier to understand after they began working with their coaches. One student mentioned that her coach helped her be successful in a class that she had been planning to drop. Another student claimed that she would have dropped out of school if she had not had the support of the program and her coach.

**Increased motivation and engagement.** Several students explained that their coaches motivated them to work harder in school and retain interest in college. One student explained that his coach connected him with tutoring resources and that his positive experiences working with his tutors inspired him to want to become a tutor or a C&C coach himself.

**Other benefits.** The students not only benefited directly from program resources, but they also shared how their C&C coaches connected them with broader resources to help them navigate the college on their own. Ashley, a student in the degree program with a focus on children’s psychology, lives independently with her boyfriend. She mentioned:

I like that I have somebody that I can go to if I’m frustrated. Before when I was at the college, I had nobody to help me, and I felt like I was always going in a circle. I didn’t feel like the college really set up a whole lot of things for students with disabilities to be successful. It’s nice to have that change.

**Discussion**

Our findings show that students most often engaged their coaches in relation to: seeking academic support and guidance, looking for opportunities to participate in social events with students with and without disabilities, discussing future career goals and identifying community service agency staff (e.g., VR counselors) who could assist them in achieving those goals, and getting assistance to resolve community living challenges and difficulties. The two most valuable components of the coaching program as perceived by these students with ID were the flexible meeting schedule and “open door” policy in which students could drop in on their coaches without an appointment, and the development of a positive student-coach relationship. Positive outcomes of the coaching program included improved academic achievement and increased academic motivation and engagement.

**Academic Supports Provided to Students with ID**

Academic support was the most frequently identified need discussed by the students during their coaching sessions, with 80% of students listing academic support as one of the topics discussed during their meetings with their coaches. The academic challenge has been identified by previous studies as one of the major barriers to college degree completion among students with ID (Cherif et al., 2014). Thus, one role of the coaches is to help students be prepared for classes by teaching them effective study habits and helping them understand faculty expectations regarding meeting course requirements.

College and university academic support services offered through DS offices are made available to students with a documented disability. However, students with ID may not have self-advocacy skills to seek out these services without assistance. Many faculty members interviewed in Cherif and colleagues’ study (2014) noted that many students did not ask for help from their instructors or advisors and did not use available resources such as tutoring services on campus. Based on the interviews, most of the students reported being unaware of how to access DS support services, how to approach faculty to ask questions about course assignments and requirements, and how to independently problem solve other challenges encountered in the college setting.

Self-Determination skills have been consistently shown to be associated with academic success and desired employment outcomes (Wehmeyer & Palmer, 2003). However, students with ID often lack these skills (Grigal et al., 2006; Izzo & Lamb, 2002; National Collaborative on Workforce and Disability for Youth, 2015; Shogren et al., 2015). It is important that everyone involved with the student with ID play a role in coaching, teaching, and reinforcing the student to develop SD skills (Shogren, et al., 2015). This can include paid coaches, peer mentors, DS staff, academic advisers, faculty, and parents. Coaching strategies like C&C can complement existing disability services on campus. Having a current DS and/or other college staff member or volunteer mentor provide a basic “check-in” on the student can help to avert difficulties the student may be experiencing.
Social Supports Provided to Students with ID

Social participation is another topic mentioned by most students when we asked them what they discussed with their coaches. Coaches used different strategies to help students engage socially, such as encouraging students to participate in organized campus events or working with students to organize a movie night and invite their peers without disabilities to participate.

Participating in campus events and making friends are very important for students with disabilities in PSE institutions because one’s social network is a marker of social capital (i.e., the resources an individual has access to through a network of social relations), which is associated with higher rates of employment in the general population (Alder & Kwon, 2002). Yet, research has shown that people with ID have smaller, less diverse social networks than their peers without disabilities (Eisenman, Farley-Ripple, Culnane, & Freedman, 2013). In a companion study using quantitative data collected by this demonstration project, we found that students with ID who participated in campus events were four times more likely to have paid employment while attending college (Qian, Johnson, Smith, & Papay, 2018). Although social participation is important, it has received much less scholarly and programmatic attention compared to providing academic support for students with ID. We argue that providing services that foster social inclusion in the PSE setting needs to be viewed as a priority for PSE programs and that mentoring programs may be one way to reach this goal.

Relationship as an Essential Feature of the Coaching Program

Students considered the trusting relationship they had with their coaches to be the most valuable component of the C&C mentoring program. Based on our interviews, students seemed very comfortable sharing their struggles and successes with their coaches. They believed that their coach was genuinely interested in them and was committed to providing support.

Building a nurturing and supporting relationship based on mutual trust is arguably an essential component of C&C. The developers of the C&C mentoring model used resilience research as one of its theoretical frameworks (Christenson et al., 2012). Three decades of resilience research have clearly shown that a strong bond to a caring adult is the most robust and pervasive protective factor associated with resilience (Masten, Cutuli, Herbers, & Reed, 2009). The findings from the current study provide evidence that students with ID recognized the importance of such relationships to their resilience in the PSE setting.

The “open-door” policy in which students could drop in on their coaches without an appointment created opportunities for students and their coaches to develop a trusting relationship. Many students in our study reported that they would just drop in and say hi to their coach. Some of them would stop by if they needed someone to brainstorm some strategies with them. All these “quick meetings” provided many opportunities for students and their coaches to interact and get to know each other.

Mentoring and Coaching are Common Strategies for Supporting Students in PSE Settings

Although very few empirical studies have investigated the effectiveness of using coaching and mentoring programs to support students with ID in PSE settings, many colleges and universities have adopted this practice (Griffin, Wendel, Day, & McMillan, 2016; Jones & Goble, 2012). In this study, the C&C coaching services complemented the DS support. Students were coached on how to request DS support services, ask appropriate questions of faculty, and manage their academic course schedule. One issue reported by several students is related to feelings of anxiety and stress due to academic and social pressures. For example, one student reported that she experienced anxiousness and had periodic meltdowns concerning her interactions with her academic program. Knowing that she could meet her coach at any time throughout the school day provided tremendous emotional support and a safe place for the student to talk about her needs. The case described by the coach is common. Epidemiological studies have shown that mental health problems are prevalent among college students (Blanco et al., 2008) and in part, this may due to the increase in academic requirement and increase in social connectedness (Twenge, 2000). Similar to the general student population, students with ID may experience emotional and mental health related challenges. In these situations, coaches provided referrals and communicated their concerns to the DS office to identify appropriate services for the student.

Limitations

Several limitations of this study need to be acknowledged. First, although all TPSID students were informed about this study, only half of the students enrolled in the program at the time of the study signed up for the interview. Thus, results from this study are based on a convenience sample and may not represent the opinions of all program participants. Hence, results from this study may not generalize to other TPSID programs. There were also limitations on the extent to which project staff could gather information...
on the student’s level of intellectual disability or the specific special education services students received in high school. Project staff were not involved in the disability determination and selection of student participants. Given the importance of student’s development of SD skills and behaviors it would be useful to use a formal scale to measure student’s SD skills (e.g., Arc’s Self-Determination Scale, Wehmeyer & Kelchner, 1995). This is viewed as a limitation of the present study requiring project researchers to rely on students self-perceptions of their SD skills during the interviews. Finally, the current study did not document the actual time that each student received coaching. It is important that future study designs account for the frequency, length, as well as the content of coaching sessions. This detailed documentation is necessary to develop a better understanding of the coach’s role and the actual level of support required by students with ID.

Implications for Practice and Research

Nationally, the number of students with ID that are entering two-year and four-year colleges and universities has been increasing over the past several years. DS offices play a critical role in supporting these students. DS staff are skilled in determining the types of support services and accommodations that will facilitate the student’s academic and social inclusion experiences on campus. This is not to suggest there are not additional considerations and challenges involved in extending support to students with ID. In the TPSID project, a coach was employed to follow, monitor, and engage students in their academic and social involvements on campus. The interviews conducted in this study revealed several important findings that provide insights into the value coaching plays in supporting students with ID in PSE settings. The C&C coaches provided students with ID the additional assistance they needed to become included and involved in the full array of college experiences.

There is an obvious need for further research and evaluation to better understand how such a “specialized” coaching approach fits within DS support provided to students with disabilities on college and university campuses. Aligning specialized services for students with ID with typical college processes is viewed as essential to enabling these students to participate more fully in campus life characterized by an authentic, inclusive college education experience (Grigal, Hart, & Weir, 2012; Jones & Goble, 2012). Questions concerning how coaching, designed for students with ID, can be more broadly extended to any student who could benefit from relationship-based support also needs to be more formally investigated.

Strategies such as universal design, which emphasize the development of services that benefit all students, rather than developing specialized services for a few students also holds promise. The C&C intervention model is based, in part, on the principles of universal design. It is based on the fundamental understanding that developing a trusting relationship between a coach and student and engaging in the process of “checking” and “connecting” is not a practice exclusive to students with ID. Rather, it has much broader applications to potentially any student, with or without a disability, who may benefit from some level of follow-along support. In addition to paid professional coaches, there are other ways to implement the basic strategies of “checking” and “connecting” within college and university settings. Disability Services or other student support offices can use volunteer mentors in this role, student mentors from the PSE setting, and requesting faculty to support 1-2 students (Hart et al., 2006; Johnson & Stout, 2011).

The literature on the need for self-determination skills in higher education continues to grow as we look at new populations entering college and barriers to the use of disability services and accommodations (Briel & Getzel, 2014; Marshak, Wieren, Ferrell, Swiss, & Dugan, 2010). Based on the present study, further research is needed to better understand the role of the coach in working with students with ID to develop their self-advocacy and self-determination skills. Skills such as setting goals, making choices, solving problems, advocating for one’s own needs for support, and following through on plans are skills that all students need to develop and demonstrate within the college environment. However, students with ID may not have developed such skills in high school. Determining what specific strategies coaches can use to help students develop the skills necessary to independently navigate the college environment is essential. For example, studies to date have found that having students with disabilities practice goal setting during mentoring sessions have helped them to meet academic course requirements (Finn, Getzel, & McManus, 2008). Coaches could also play a role in helping students to: develop an understanding of their disability in relation to accommodations they need to successfully participate in academic courses, learn how to communicate effectively with college faculty to understand course requirements and/or resolve potential conflicts, and access support services on their own. Research on these and other roles a mentor can play in PSE is sparse. Research is needed to determine the efficacy of these strategies.

Of further importance is the need for research to better understand who should serve as coaches and
what background, knowledge, and experience they need to bring to this position to effectively work with students with ID. Related to this is the type and level of professional development colleges and universities should invest in and make available to those who seek mentor positions. Research on the overall mentoring process in terms of its institutional responsibilities and level of authority to act on behalf of students is needed. Should the role be that of an advocate, counselor, teacher, friend, and/or frontline mental health professional? Central to the mentor’s role is developing a positive relationship with the student to support and act on their behalf. As Brown, Takahashi, and Roberts (2010) found in their review of the literature on mentoring in postsecondary settings, while mentoring is viewed as a beneficial practice to support students with disabilities, the evidence-based research on it is extremely limited.

Conclusion

Given the influence of increased professional and public awareness, raised parent expectations, and supporting federal and state legislation, PSE opportunities for students with ID have increased nationwide. The complexity of conceptualizing and implementing PSE programs for students with ID requires an understanding of the university program development process as well as the various rules and regulations of the university based on law and common practice (Thoma, 2013). In this TPSID project, students with ID at two community and technical colleges were provided Check & Connect coaching services. The process of engaging students with ID in these settings was multifaceted and required buy-in and involvement from administration, faculty, and support service and DS staff. It began with a commitment from leadership at the top; involved a campus-wide discussion with all faculty, support services staff, and administration to develop an understanding of the implications of moving forward and gain consensus; a strategic planning process led by the DS offices to identify and work through potential barriers and challenges to implementation; staff development focused on understanding the educational needs, capabilities, and accommodation strategies for students with ID; and an evaluation process to provide regular and continuous feedback to administration and project implementers. There are clearly many policy and system-level, administrative, and programmatic challenges that will need to be overcome to ensure all students with ID have an opportunity to participate in inclusive PSE experiences. The present study highlighted the importance of providing academic, social, and career planning support to students with ID with support of the DS offices on the two campuses and by engaging a coach to facilitate the student’s development of self-determination and self-advocacy skills to have the student assume a leadership role over their academic program involvements and participation in college social activities. Mentoring relationships can have a profound impact on those involved in them as well as those around them. The inclusion of students with ID into the mainstream academic and social environment of campus life was a major goal of the demonstration project. The coach played a valued and important role in creating opportunities for students with ID to be included and to be successful.

References


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Table 1

*Types of Support Provided by Coaches (N=39)*

<table>
<thead>
<tr>
<th>Content</th>
<th>Number of Students (percentage)</th>
<th>Number of Times Mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>31 (80%)</td>
<td>82</td>
</tr>
<tr>
<td>Social Participation</td>
<td>21 (54%)</td>
<td>30</td>
</tr>
<tr>
<td>Career Guidance</td>
<td>17 (44%)</td>
<td>20</td>
</tr>
<tr>
<td>Community Living</td>
<td>11 (28%)</td>
<td>13</td>
</tr>
<tr>
<td>Registration</td>
<td>7 (18%)</td>
<td>8</td>
</tr>
<tr>
<td>Mental Health and Well-Being</td>
<td>6 (15%)</td>
<td>7</td>
</tr>
<tr>
<td>Soft Skills (e.g., problem solving, time management)</td>
<td>6 (15%)</td>
<td>7</td>
</tr>
<tr>
<td>Transition to PSE</td>
<td>4 (10%)</td>
<td>5</td>
</tr>
<tr>
<td>Financial Literacy Skills</td>
<td>4 (10%)</td>
<td>4</td>
</tr>
</tbody>
</table>
### Main Themes and Supporting Quotes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Student Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Component of Check and Connect</strong></td>
<td></td>
</tr>
<tr>
<td>Academic support</td>
<td>I have a challenging time trying to remember things. I am good with concepts and studying, but when it comes to the tests I just go completely blank and forget everything. I’ve been working with (mentor name) on finding different strategies of how to overcome that challenge, studying and retaining the information (Lilly).</td>
</tr>
<tr>
<td>Social participation</td>
<td>When we do Check and Connect, sometimes we go out to places. That’s normally like the social type stuff or we come here for game nights or we go out to see a movie. (Greg)</td>
</tr>
<tr>
<td>Career Guidance</td>
<td>[Coach] knows what I’m shooting for. I’m hoping really just to be a bookkeeper. I’m not looking for a tax accountant. I do have a diploma, so I can do payroll if I want to. This is kind of open ended. I’m not sure if I’m going to be able to function in a work place, but I try not to focus on that part. I just try to focus on using the school not just for learning but as practice, trying to get used to people and stuff. (Hayley)</td>
</tr>
<tr>
<td>Community Living</td>
<td>My favorite part is that [coach] is very understanding about the stuff you go to her about. If you ever have a problem with anything like at the apartments I live at or anything, she will help you with it. She will explain it to you and stuff. She is very understanding. (Jeremy)</td>
</tr>
<tr>
<td><strong>Program Characteristics Valued by Students</strong></td>
<td></td>
</tr>
<tr>
<td>Flexible Meetings &amp; Open Door Policy</td>
<td>I try not to go to [coach] all the time when I am struggling, but if I’m really struggling on something I’ll go to her. Some weeks I don’t go to her at all and other weeks I might go there once or twice. (Julie)</td>
</tr>
<tr>
<td>Relationship Based Approach</td>
<td>When I first came here, it was really hard for me to say goodbye to my parents. Probably every day I would start crying, because I felt like my mom would leave me there. I would just get really scared and sad when I think of that. I knew it had to be that way. [Coach] is a person if you need help with something, or if you are having a difficulty she’s there, and you can go to her and she’ll help you. She takes the time to get to know you. (Carly)</td>
</tr>
<tr>
<td><strong>Overall Benefits</strong></td>
<td></td>
</tr>
<tr>
<td>Improved academic performance</td>
<td>I love that program [TPSID program]. I think it is very beneficial, not just to me but to everybody who uses it. I would very hate to see it not be here for future years. From my perspective it has helped me abundantly succeed in school. Without it I don’t think I would have succeeded as much as I have. (Dylan)</td>
</tr>
<tr>
<td>Increased motivation &amp; engagement</td>
<td>[Coach] was a big help. When I talked about when I was in a slump. It helped. It actually got me back interested in college. (Zach)</td>
</tr>
</tbody>
</table>
Exploring Barriers for Facilitating Work Experience Opportunities for Students with Intellectual Disabilities Enrolled in Postsecondary Education Programs

Andrew R. Scheef¹
Brenda L. Barrio²
Marcus I. Poppen²
Don McMahon²
Darcy Miller²

Abstract

There are a multitude of benefits associated with employment, which many individuals with intellectual and developmental disabilities (IDDs) are not afforded due to their struggles to find and maintain work. These poor employment outcomes are in part being addressed by the over 240 postsecondary education (PSE) programs for students with IDDs that exist on college and university campuses in the U.S., many of which include work experience as a program component. A sequential mixed methods study, featuring a quantitative survey and qualitative interviews, was conducted to explore barriers faced by PSE program staff when facilitating work experience engagements. Findings include the identification of common barriers to facilitating paid work experience for students in PSE programs as being: (a) transportation issues, (b) employer perceptions of the abilities of people with disabilities, (c) inadequate number of staff hours to support students in the workplace, and (d) finding time in the students’ schedule. A discussion about these findings, including implications and recommendations for future research, has also been provided.

Keywords: Postsecondary education programs, intellectual disability, employment training

While youth with disabilities are susceptible to a multitude of undesirable post-school outcomes, perhaps the most salient involves employment. Individuals with disabilities can be a valuable asset to the workforce, yet have been consistently underemployed when compared to those without disabilities (Butterworth, Migliore, Sulewski, & Zalewska, 2014; U.S. Department of Labor, 2015). This is especially concerning because work is a basic human right that helps to shape an individual’s identity and understanding of self within the broader societal context (Brown & Lent, 2013; Wehman, 2011). Grossi, Gilbride, and Mank (2014) described work as “the cultural rite of passage through which one enters into adulthood” (p. 157). While many take for granted the opportunity to work even the most basic of jobs, people with disabilities often remain overlooked as participants of the labor force.

In order to assist individuals with intellectual or developmental disabilities (IDDs) achieve life goals, which often times includes employment (Kumin & Schoenbrodt, 2015), postsecondary education (PSE) programs for individuals with disabilities have become increasingly common on institutes of higher education across the U.S. (Weir, Grigal, Hart, & Boyle, 2013). Equipped with the knowledge that paid work experience is an evidence-based predictor of positive employment outcomes for individuals with disabilities (Carter, Austin, & Trainor, 2012; Mazzotti, et al., 2015; Test et al., 2009), many programs include this as a program component (Grigal et al., 2015). However, due to a variety of reasons, it may be challenging for program personnel to provide the opportunities to all students who are interested.

As such, the purpose of this study was to identify and explore barriers faced by PSE program personnel who facilitate paid work experience opportunities for students enrolled in their programs. A survey of PSE program directors was administered in fall 2015 and follow-up interviews were conducted to gain more in-depth understanding of potential barriers.

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PSE Programs and Job Training

PSE programs serving students with IDDs on institutes of higher education have existed since the 1970s (Neubert, Grigal, Moon, & Redd, 2001) and have significantly increased in numbers in recent years (Weir et al., 2013). Most of these programs do not grant higher education degrees to program participants, but rather provide individualized special education services to students with disabilities (Grigal, Hart, & Weir, 2012; Papay & Bambara, 2011; Plotner & Marshall, 2014). Expected student outcomes vary between programs and differ from those of the general student population; PSE programs are not designed to serve as an alternative way to gain matriculation for students who do not meet the general admittance requirements for an institute of higher education (Plotner & Marshall, 2014). PSE programs serve students on a community college, college, or university campus, a more age-appropriate learning environment for students of this age (Kleinert, Jones, Sheppard-Jones, Harp, & Harrison, 2012; Uditsky & Hughson 2012; Weir et al., 2013).

A primary goal of many PSE programs involves career development and increasing positive employment outcomes for students (Grigal et al., 2012; Papay & Bambara, 2011). The 2013-2014 annual report detailing Transition Postsecondary Education Program for Students with Intellectual Disability (TPSID) programs provides encouraging data to suggest a measurable positive impact as a result of students with disabilities participating in PSE programs (Grigal et al., 2015). First, this report indicates that nearly 40% of individuals enrolled in TPSID programs were involved in a paid work experience. Especially encouraging is that 48% of these students never previously had a paid job experience, which shows the value of the programs because this type of engagement is widely-regarded as a predictor of post-school success for individuals with disabilities (Mazzotti et al., 2015; Test et al., 2009). However, perhaps the most notable employment statistic from the report is that 41% of students had a paying job upon exit from the program. These results are similar to those presented by Moore and Schelling (2015) who found that individuals completed a PSE program for students with IDDs were more likely to find employment and earn higher wages than those who did not.

In order to support career development and positive employment outcomes among program participants, the development of employment skills for students with IDDs is a primary focus and key component of many PSE programs. The importance of including employment training as part of a PSE program for individuals with IDDs is highlighted by results from a national survey that indicate 70% of families of students with IDDs and 81% of professionals who work with youth with IDDs describe positive post-school employment outcomes as very important (Benito, 2012). Furthermore, in their survey of parents of youth with disabilities, Martinez, Conroy, and Cerreto (2012) found that approximately half of respondents noted a preference for PSE programs that have a primary focus of positive employment-related outcomes for students. This value of employment training as a critical feature of PSE programs is further emphasized by the inclusion of career development as the second Think College PSE Program Standard (Grigal, et al., 2011).

Furthermore, Griffin, McMillian, and Hodapp (2010) explored parent attitudes regarding PSE program structure and came to the conclusion that “PSE programs should prioritize preparation for employment as the primary outcome for their students” (p. 345). Papay and Bambara (2011) surveyed PSE program coordinators to identify the primary purpose for students attending school on a college campus. They found that nearly all program coordinators (90%) identified the development of employment or vocational skills as a reason for students to be on campus, leading them to consider the notion that “we could perhaps refer more accurately to programs based on college campuses as employment programs based in age-appropriate settings rather than as postsecondary education programs” (p. 90).

Barriers to Paid Work Experiences in PSE Programs

While engagement in paid work experience is a predictor of positive post-school outcomes for individuals with intellectual and developmental disabilities (Carter et al., 2012; Mazzotti et al., 2015; Test et al., 2009), employment specialists may struggle to find opportunities for their students. Factors relating to the PSE program structures, inter-agency collaboration, the students themselves, and employers may contribute to the problem.

Barriers related to PSE program structure. There are several programmatic barriers that make it challenging for PSE programs to facilitate paid work experience, perhaps most notably the lack of training and knowledge in employment supports of PSE staff. The 2013-2014 TPSID report (Grigal et al., 2015) describes many PSE staff as having limited knowledge about best practices involving customized and integrated employment. Additionally, PSE program staff have described limited financial resources as another significant barrier to providing the framework necessary to support the facilitation paid work experience for students (Petcu, Chezan, & Van Horn, 2015).
Grigal and Dwyre (2010) also identified barriers involving time as a resource; some PSE programs have difficulty managing time for work experience due to the academic expectations for students.

**Barriers related to inter-agency collaboration.** Another barrier to facilitating paid employment for students in PSE programs involves inter-agency collaboration, mostly notably with Vocational Rehabilitation (VR). While partnerships between PSE programs and VR can be fruitful and provide additional opportunities for students (Sheppard-Jones, Reilly, & Jones, 2013), there can be challenges with the relationship. PSE program coordinators surveyed by Petcu et al. (2015) identified barriers such as: (a) a large investment of time to develop relationships with VR personnel, (b) lack of clarity and guidance regarding state VR regulations for students who are enrolled in a PSE program, (c) an inefficient system for VR referrals, (d) lack of interest from VR personnel to collaborate with PSE staff, and (e) issues involving the VR payment system.

**Barriers related to student factors.** In addition to barriers to work experience involving PSE program staff, challenges have been identified relating to the students themselves. For example, Lysaght, Ouellette-Kuntz, and Lin (2012) explained that individuals with IDD may face workplace challenges, including “slower than average learning of new tasks, impaired memory, slow and sometimes impaired motor performance, and reluctance to change roles and routines” (p. 412). Petcu et al. (2015) identified additional barriers that directly involve the student as being related to “skill level, motivation, responsibility and accountability, difficulty in identifying realistic employment goals, problem behavior, and attendance to work” (p. 20). Although it is perhaps not a barrier directly related to the student, issues involving transportation to and from the job site have been identified as a challenge when facilitating work experiences for students enrolled in PSE programs (Grigal & Dwyre, 2010; Petcu et al., 2015).

In addition to barriers that involve the students directly, many students arrive to PSE programs unprepared to maintain a paid employment position (Dwyre & Deschamps, 2013; Grigal et al., 2015). This unpreparedness is perhaps due to a lack of training and awareness of employment-related best practices at the high school level (Dwyre & Deschamps, 2013; Grigal & Hart, 2010). As such, some students enter PSE programs with insufficient work skills and arrive with limited information regarding interests and ability. The 2013-2014 TPSID report (Grigal et al., 2015) noted that poor student preparation and assessment of skills were challenges reported by program coordina-
licitations that were returned due to an invalid email address. The survey was open for four total weeks, with a reminder email sent after the first two weeks. As an incentive, survey respondents were offered a code to receive a free Redbox movie rental.

Survey participants were asked to indicate if they would be willing to participate in a follow up interview. Ten participants were selected using a purposeful sampling technique that ensured interview participants represented a diversity of program characteristics (e.g., size, location, involvement with VR).

Instruments and Procedures

Survey. This research is based on a sub-section of a larger survey to better understand how paid work experiences are facilitated in PSE programs. This component, focused specifically on items related directly to work experiences for program participants, asked program to identify: (a) the extent to which specific sources provide employment support or services to program participants, (b) the setting and conditions in which students receive work experience, and (c) the level to which specific items are barriers to finding paid work experience for students. These survey elements were designed by the researchers and reflect findings presented by: Carter et al. (2009); Grigal et al. (2015); Grigal and Dwyre (2010); Grigal and Hart (2010); Hughson, Moodie, and Uditsky (2006); Luecking (2010); and Petcu et al. (2015). The survey included closed ended questions relating to the aforementioned research, as well as open ended questions that allowed participants to elaborate on their responses.

This particular study is based on the survey items relating to barriers to facilitating paid work experience. The survey instrument contained 28 items in this section. Participants were asked to identify the extent to which each items is a barrier by selecting one of the following responses: Not a Barrier, Small Barrier, Large Barrier, or Critical Barrier.

This web-based survey instrument was designed based on the Tailored Design Method (Dillman, Smyth, & Christian, 2014). It was created using Qualtrics software and was reviewed and revised based on the three-stage strategy described by Campanelli (2008) to increase content validity. Five external reviewers with expertise in special education and survey design were involved with this process.

Interviews. In order to provide structure and flexibility, the interviewer engaged in one-on-one semi-structured interviews, utilizing a protocol that is designed to be flexible and not followed precisely (Kvale & Brinkmann, 2009). Following the sequential mixed methods guidelines (i.e., quantitative find-ings in the first strand inform qualitative findings in the second strand), the final interview protocol was revised after a preliminary analysis of the survey results and included questions that aid in exploring other noteworthy findings identified in the survey results. Interviews were conducted on the telephone and audio recordings of the interviews were transcribed verbatim and used for analysis.

Data Analysis

Quantitative analyses. Descriptive statistics were used to explore program characteristics and responses regarding barriers to finding paid work experiences for students in PSE programs. The survey item designed to measure the extent to which something is a barrier to facilitating paid work experience opportunities asked participants to respond using the following scale: Not a Barrier, Small Barrier, Large Barrier, or Critical Barrier: Percentages of participants responding positively to each of the scale items for each potential variable were calculated and used to identify which items are viewed as the most significant barriers. Respondents were given an opportunity to include any other barriers that were not presented on the list. These items were collectively reviewed to identify any additional barriers.

Qualitative analysis. For the second phase of this sequential mixed methods study, an interview protocol was developed based on the findings from the quantitative survey. Transcribed interviews were imported into the qualitative analysis software program Atlas.Ti and analyzed using thematic analysis (Braun & Clarke, 2006). In order to increase credibility of the results, a second coder reviewed and coded the data. Having an additional perspective during analysis meets the credibility measure of investigator triangulation (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005).

Meta-Inference. The study included a phase to develop inferences based on the information revealed by the quantitative and qualitative phases of the study (Teddlie & Tashakkori, 2009). During analysis of the data, the research questions and purpose of the study were prominent in the mind of the coders. Notes and summaries of data were re-examined and discussed. This process allowed the researchers to establish tentative interpretations, which were then re-evaluated for meaning and relation to other preliminary findings.
Participants

Survey respondents. While the Think College database included contact information for 245 PSE programs, only 220 of the email solicitations were delivered. Two rounds of email invitations resulted in 75 survey responses, a response rate of 34%. However, a preliminary analysis eliminated 10 responses from data analysis. When asked about their role in the PSE program, four respondents selected: “None of my job responsibilities involve designing and/or facilitating career development opportunities (including work experience) for students in the program.” As the survey was designed for those who facilitate work experiences, the instrument was programmed to end if this option was selected. Six respondents provided demographic and program characteristics, but did not complete the sections focused on barriers and strategies. As these components are essential for data analysis, these six responses were eliminated from all of the analysis. Considering both of these factors, analysis of data included information from 65 participants, meaning 29.5% of the total survey solicitations resulted in usable data.

Interviewees. Individuals who completed the survey were asked to identify if they would be available to engage in a follow-up interview. Forty-eight respondents identified themselves as being willing to be interviewed to further explore the results of the survey. Ten interviewees were purposefully selected in order to provide a diverse sample, with particular attention paid to representing the varied regions of the United States as well as different types of institutions of higher education (e.g., college, university, community college, vocational school). In addition, the responses of potential interviewees were reviewed to ensure that there was within sample variance (i.e. the respondent did not provide the same answer for a large number of survey items) and the individual had responded to each item of the survey. Table 1 contains information about the interview participants.

Survey

An online survey was administered to personnel who work with PSE programs that serve students with IDDs to identify potential barriers when facilitating work experience opportunities for students. The survey focused on employment services, with an emphasis on barriers to facilitating student work experience and strategies utilized to overcome potential obstacles. A Chronbach’s alpha was conducted after data from the survey was collected. The results showed a .87 alpha which indicates to be in good range of internal consistency (Litwin, 1995); therefore, one can imply that the survey could be further used in reliable manner.

Barriers to work experience. Respondents were given a list of 28 potential barriers they may face when facilitating work experiences for students enrolled in their PSE program and asked to identify the extent to which each was a barrier. A complete listing of responses for each of the 28 barriers can be found in Table 2.

In order to identify items that are commonly identified as barriers, the three items that respondents most often selected as being a Critical Barrier were identified. The inclusion of three items was selected because these represent 10% of all of the barriers. These three items that were most often identified as a Critical Barrier included: Transportation issues (26.2%), Employer perceptions of the abilities of people with disabilities (21.5%), and Inadequate number of staff hours to support students in the workplace (18.5%). In order to consider other items which may be significant barriers, the response categories of Large Barrier and Critical Barrier were combined. Forty-five percent or more of respondents identified concerns related to these three individual items. This cut off percentage was selected both because it presented itself as a natural cutoff point (the next closest item was over 10% point lower) and again includes three items, or 10% of the total barriers. This confirmed two of the already identified items, including Transportation issues (52.4%) and Employer perceptions of the abilities of people with disabilities (46.1%). In addition, combining these response categories added Finding time in the students’ schedule (46.1%) to the frequently identified barriers.

In order to identify items not included on the list, respondents were provided with an opportunity to include any additional barriers they face when facilitating work experience opportunities for students enrolled in their affiliated PSE program. Of the 65 respondents, 11 included written comments to describe additional barriers. The most prominent theme from the comments involved student and family concerns over a loss of government benefits due to earned wages, which was identified by three respondents. One person explained, “The biggest barrier to long term employment is the difficulty in managing SSI when students earn an income. Some parents are worried that student SSI checks are affected by income.” Another parent-related comment described low-expectations regarding employment by the family as well as over-assistance leading to a lack of student independent living skills. Other comments related
to barriers described: difficulty finding partner employers, high costs of individualizing services, lack of services post-program, student lack of ambition, and perceptions by employers that college internships must be unpaid.

**Interviews**

Interviewees were presented (aurally and visually) with frequently identified barriers to paid work experiences, as identified by the survey. The barriers include: transportation issues, employer perceptions of the abilities of people with disabilities, finding time in the students’ schedule, and inadequate number of staff hours to support students in the workplace. Several related questions were asked to further explore these particular barriers and the extent to which they present a challenge in the participant’s program.

Nine of the ten interviewees expressed general agreement with the aforementioned barriers. Responses representative of the group included: “Those are all true for us as well.” “No, none of it surprises me at all,” and “We’ve encountered all of them. We just try to knock them down as much as we can.” Responses regarding specific themes are described below.

**Transportation issues.** Responses describing transportation issues were mixed. One participant shared an anecdote describing the struggles of transportation-related issues for PSE programs. The interviewee described a student who was interested in working in the health care field. “He had a job ready for him, the employer was ready to hire him, but we just could not find a way to get him to work. So, by the time that was figured out, the job was gone.”

Transportation barriers may be more of an issue for programs in more rural settings. Three interviewees specifically noted that this may be the case. One interviewee said, “Once you get outside [the city], our state is a pretty expansive rural area, and transportation is an issue.” Other interviewees provided a variety of responses explaining why transportation-related issues were not a barrier for their specific program.

Recognizing that getting students to and from a work site can be challenging, one interviewee who works in an urban environment described making efforts to find work experience placements within walking distance from the campus. Two participants explained that they were able to manage this barrier by utilizing public transportation. Three interviewees described transportation as being provided by partner sources, such as developmental disability support organizations, state-sponsored supports, and the local school district. However, one interviewee explained that some of these sources may not provide reliable transportation. This frustration was described as such: “You have to be [at work] at a certain time and when you are at the whim and fancy of a transit service or Medicaid provider, they don’t often see the urgency of getting you where you need to be or showing up.”

**Employer perceptions of the abilities of people with disabilities.** Survey respondents frequently identified one barrier to finding paid work experiences as employers’ perceptions regarding abilities of individuals with disabilities. Interviewees generally did not specifically describe this as a barrier for their program. One participant, who has most students involved with unpaid internships, explained that while he did not find this to be a barrier, “if they were to be paid, it might have been a little more difficult.” Another interviewee noted that because the program seeks time-limited work experiences, he feels employers may be more willing to provide opportunities for students, regardless of their perceptions. One interviewee spoke about the inclusive-nature of their region, which they felt translated well towards finding work experience opportunities for students. This individual said, “We have a very accepting community in general. We have a sort of ‘the more the merrier’ feel. Everyone is family. That is really the attitude of most employers of our students in general.”

**Finding time in the students’ schedule.** None of the five interviewees who spoke directly about that lack of time in a student’s schedule described this specific concern as an issue in their program. These participants generally described employment as a priority, and as such were able to develop student schedules around work experience. One explained, “We try to work around that as best we can because our program is a career preparedness program and we don’t want to hinder their careers.” Another interviewee said, “We try to put the vocational training internship as primary and then there are other things they can do to work around that.” It may be also possible to enlist the help of employers to manage this potential barrier. One participant explained, “Employers on-campus work with us to accommodate student schedules and value any level of work students are capable of.”

**Inadequate number of staff hours to support students in the workplace.** Specific responses from interviewees did not indicate that staffing was an issue for facilitating paid work experiences for students. One interviewee said that it is the responsibility of the employer to provide staffing. Another explained their program intentionally limits on-site staffing in order to increase the potential for long-term sustainability. This interviewee said, “What we have done for most of our students when they start the internship is we
might provide some support initially, but we really want them to have more natural supports through that internship.” In order to ease the burden of staffing students at the job site, two interviewees discussed using peer mentors as support personnel. When asked if they felt the program had a sufficient number of peers to provide the supports needed by the PSE students, one interviewee responded, “Oh yeah, we have mentors and then a back-up set of mentors who are there in case one can’t show up.”

“Other” response: Loss of benefits as a barrier. The fear of parents or students losing disability-related benefits as a result of engaging in paid work experience for students was identified as a barrier by several respondents in the survey (as an “other” barrier not included on the survey). Five participants agreed that this is a barrier for some students and families in their program. In fact, one interviewee identified this as a primary reason why their program only offers unpaid internships to students. Other interviewees discussed connecting students and families with benefits specialists in order to gain a better understanding of how receiving wages might impact their benefits. One participant explained that the fear of losing benefits is more pronounced if the family has faced this issue in the past. This interviewee described individuals and families in the situation saying “I’m not crossing that bridge again. I will choose not to have a job over taking a chance of losing my benefits”.

Three interviewees, however, explained that fear of losing benefits is not a barrier to finding paid work experiences for students in their PSE program. One interviewee explained that this is the case because the program has a goal of finding paid employment, which is made clear to families before a student is admitted. Another interviewee explained benefits-related issues arise post-program graduation. This individual said, “There’s been much more hesitation to find work, which is the opposite of what is supposed to happen as the outcomes of these programs. But, that’s how the family made the choice, at least for now.”

Meta-Inference

After analyzing quantitative and qualitative results, a meta-inference can be made regarding the most common barriers to facilitating paid work experience for student enrolled in PSE programs were: transportation issues, employer perceptions of the abilities of people with disabilities, inadequate number of staff hours to support students in the workplace, and finding time in the students’ schedule. Although qualitative data were consistent with identifying these barriers within the overall group, a few interviewees provided specific information regarding these items in the subsequent discussion, with some explaining how these items were not a barrier for their particular program. Therefore, while quantitative and qualitative results have inconsistencies at the individual level, the overall meta-inference represents the most common barriers for facilitating work experience in PSE programs.

Discussion

This study used sequential mixed methods (survey informing interviews) to explore barriers to the facilitation of work experience opportunities for students with IDDs enrolled in PSE programs.

Survey respondents were presented with 28 potential barriers that PSE staff may face when facilitating paid work experience opportunities for students in their programs. This list of potential barriers was identified through a review of the literature. The following are barriers that were frequently identified by respondents: transportation issues, employer perceptions of the abilities of people with disabilities, inadequate number of staff hours to support students in the workplace, and finding time in the students’ schedule. Interviewees were presented with this list and while they generally agreed that these are common barriers faced by PSE program staff when facilitating work experience, responses regarding specific items were inconsistent.

Of these items, transportation issues was the most frequently identified barrier to facilitating paid work experience by survey respondents. This is not surprising, as transportation-related barriers have been identified in previous literature, including Grigal and Dwyre (2010) and Petcu et al. (2015). The latter of these studies identified transportation in PSE programs as one of the more significant “challenges encountered in preparing students with IDD for competitive employment” (p. 369). Other works have mentioned transportation-related issues in other contexts, including involving getting the student to school or to social events (Dwyre, Grigal, & Fialka, 2010; Grigal et al., 2015).

Employer perceptions of the abilities of people with disabilities were also identified as a frequently identified barrier to paid work experience for students in PSE programs. While interviewees did not provide specific examples of negative views of workers with disabilities, previous literature describes common concerns held by employers regarding individuals with disabilities working in their place of business. These include: the need for accommodations (Houtenville & Kalargyrou, 2012; Jasper & Waldhart 2012),
assumptions of low productivity or an employee’s inability to complete requisite job tasks (Houtenville & Kalargyrou, 2012; Kaye et al., 2011), workplace safety (Hernandez et al., 2008; Houtenville & Kalargyrou, 2012), legal concerns (Hernandez et al., 2008; Lengnick-Hall, Gaunt, & Kulkarni, 2008), and a negative impact on co-workers and customers (Lengnick-Hall et al., 2008). Being aware of these potential negative perceptions will help PSE staff alleviate these concerns as they support employers providing work experience opportunities.

Another commonly identified barrier to paid work experience for students in PSE programs involves inadequate number of staff hours to support students in the workplace. This barrier was also identified in the study conducted by Petcu et al. (2015), which also used a survey of PSE staff to identify employment-related challenges. While interviewees in this study agreed that low staff hours are a significant barrier, they did not provide comments to support this notion. Many of the comments echoed the recommendation made by Grigal and Dwyre (2010), who suggest that PSE programs allocate sufficient and flexible staffing to support students who are engaged in work experiences.

A fourth item frequently identified in the survey as a barrier to facilitating paid work experience was finding time in the students’ schedule. The difficulty of balancing academics and vocational training was also identified as a challenge in Grigal and Dwyre’s (2010) study of PSE and employment training. As a result, the authors explained that successful programs “[set] paid employment as a goal” and provided “flexible student schedules” (p. 3). Comments from interviewees in this study reflected these practices, which may explain why these interviewees did not see this as a barrier for their program.

Additional findings relating to barriers. In addition to the items that were frequently identified as barriers, participant responses to other survey items are also noteworthy. These items were not discussed in the qualitative interviews and as such were only explored using survey data (see Limitations for more information).

Business-related barriers. Several business-related barriers to finding work opportunities for students in PSE programs that were identified in the literature were not as present in the results of this survey. While Petcu et al. (2015) found that the lack of available jobs was a challenge for finding employment opportunities for students in PSE programs, respondents in this survey generally did not see this as being the case. Nearly three-quarters of survey respondents identified lack of paid jobs in the area as not a barrier or a small barrier. A slightly lower percentage of PSE staff identified limited number of weekly available hours offered by employer as not a barrier or a small barrier. It is encouraging that PSE staff generally felt that the job opportunities are available to the students with IDDs enrolled in their program.

Grigal and Dwyre (2010) identified additional business-related challenges as involving changes in management and layoffs due to seasonal work. However, survey respondents in this study described these barriers as being less critical. Over three-quarters of respondents identified each of these items as not a barrier or a small barrier.

Barriers relating to PSE programs. Internal barriers to facilitating paid work experience for students enrolled in PSE programs were described by Grigal and Hart (2010). These include a lack of PSE staff training regarding integrated employment, customized employment, and job development. Respondents in this survey generally felt like their staff was well-trained. Over three-quarters of respondents felt that each of these items was either not a barrier or a small barrier. This is perhaps reflective of an increased emphasis on supporting competitive employment outcomes for individuals with disabilities.

Student-related barriers. Petcu et al. (2015) found factors relating directly to the students in the PSE program as impacting employability, including “skill level, motivation, responsibility and accountability, difficulty in identifying realistic employment goals, problem behavior, and attendance to work” (p. 369). However, survey respondents in this study generally had more positive views of the views of their students. The overwhelming majority PSE staff who completed the survey in this study found each of these items to be either not a barrier or a small barrier.

Other barriers related to student preparation were identified by Grigal and Hart (2010). These items are less about student characteristics, but rather involve low levels of pre-program employability training and vocational assessments. While survey respondents in this survey identified these as more of a barrier than the aforementioned student characteristics described by Petcu et al. (2015), most identified these items as either not a barrier or a small barrier.

Limitations

While measures have been taken to create a rigorous design, there are certain limitations that must be considered when interpreting the results. Considering the limitations of this particular study may be especially important due to the wide variance of PSE program design, the generally low numbers of PSE programs in existence, and small sample size. In addition to the
inherent limitations involved with survey and interview-based research, other items should be considered when considering the findings of this study.

The items asked respondents to identify strategies they use to facilitate paid work experiences. As some PSE programs only provide internships or unpaid work experiences for students, these respondents may have been unsure how to respond. Four survey respondents provided written responses that indicated this was the case for their program. Other respondents who do not offer paid work experience may have also been unsure how to respond to these items.

Missing data were also a concern in the qualitative phase of the study. Interviewees were presented with a list of items identified frequently in the survey responses. Participants were then only asked a general question about the groups of items, specifically “Does anything on this list surprise you?” While this question leads to broad agreement with the items on the lists, more detailed information could have perhaps been collected if each item was asked about individually. As a result of this broad question, some items on the list were not specifically addressed by the interviewees. Not having this detailed information about each item may have misguided the meta-inference process or perhaps have left a gap to answer the research questions in a holistic manner.

Future Implications for Research and Practice

This study explored barriers associated with facilitating work experience opportunities for individuals enrolled in PSE programs serving students with IDD. Work experience is a key component of career development activities for individuals with disabilities (Test et al., 2009), and as such an essential piece of a program designed to increase employability for students in PSE programs (Grigal et al., 2011). Implications for both Disability Service personnel and PSE program staff are discussed below.

Implications for Offices of Disability Service

As the structure and organization of PSE programs continue to develop, as does their relationship with Offices of Disability Services. The Association on Higher Education and Disability (AHEAD) released a white paper providing guidance to Disability Service professionals regarding PSE programs for students with IDD (Thompson, Weir, & Ashmore, 2011). The document acknowledges that while Disability Service providers are not necessarily involved in the direct operation of PSE programs, these professionals “are in a unique position professionally to inform institutional decisions to design and implement programs that are welcoming and inclusive for students with intellectual disabilities” (p. 1).

PSE programs that have a goal of providing inclusion to the fullest extent possible may aim to provide their students access to the same institutional supports as traditional students (Grigal et al., 2011). As such, program developers may seek to partner with Disability Service personnel to support the goals of students. Partnerships like this highlight an institution’s value of intellectual diversity by providing students with IDD access to the same resources as their peers (Jones et al., 2015). It is not uncommon for Offices of Disability Services to be involved with PSE programs. Plotner and Marshall (2015) found that 30% of PSE programs had involvement from Disability Services during PSE program development. Also, 24% of PSE programs in their study continued receiving supports from Disability Services.

While supporting the facilitation of work experience may be outside of the typical services offered by Offices of Disability Services, personnel may be able to lessen some of the barriers identified in this study. The aforementioned AHEAD white paper recommends that “Disability Service professionals need to define their relationship to an existing or developing [PSE programs] focusing on such things as the delivery of accommodations, campus access, and technology usage” (Thompson et al., 2011, p. 2). While accommodations mostly involve the classroom setting, the latter two services typically offered by Disability Services may help the address barriers to paid work experience identified in this study.

Campus access. As personnel from the Office of Disability Services may have established connections with variety of people and organizations on campus, they may be able to support campus access to students in PSE program (Plotner & Marshall, 2014). When work experience occurs on-campus, these connections may be especially valuable to establish job placements for students. When considering the barrier employer perceptions of individuals with disabilities, having personnel from Disability Services helping to network with potential on-campus employers might reduce the impact of this barrier. In addition, Disability Services may be able to help address the transportation issues barrier by assisting with pre-existing transportation services offered on-campus.

Technology usage. As the Office of Disability Services may have an Assistive Technology (AT) expert on-staff, this individual may have the expertise to connect students in PSE programs with technology to support vocational goals. Shaw and Dukes (2013) have advocated for PSE programs to increase their use of evidence based practices and for the field to
set an agenda of research including technology interventions to support transition and employment needs.

As AT devices may help a student be more independent in the workplace, this expertise from Disability Services may help alleviate the barrier inadequate number of staff hours to support students in the workplace. When students are able to be more independent, fewer supports from PSE staff may be necessary. In addition, AT may be able to help address the barrier relating to transportation issues. Disability services can use research-based tools to support student’s transportation needs. For example, Mechling and Seid (2011) used a handheld personal digital assistant (PDA) to provide prompts (picture, auditory, and video) for adults with IDDs and McMahon, Cihak, and Wright (2015) used augmented reality navigation on mobile devices to help students with IDDs in a PSE program navigate to employment opportunities.

Implications for PSE Staff

Being aware of potential barriers to facilitating paid work experience will help PSE staff develop appropriate program components to better serve students. While this is valuable information for existing programs, it may be especially useful to individuals interested in creating new programs on campuses in the U.S. and beyond. Knowing these potential barriers may provide PSE staff with guidance as they explore the local job landscape. For example, knowing that transportation issues may hinder the ability to provide job training opportunities for students is something that PSE program developers may want to consider when designing programs. In addition, while survey respondents identified finding time in the students’ schedule as a common barrier, some interviewees explained that this was minimized by making work experiences a priority. When a PSE program has paid employment as a primary program outcome goal, student schedules should be developed around providing job experience to ensure this component is prominently featured.

Especially encouraging is that concerns related directly to the student (e.g., behavior, academic skills, personal hygiene) were not frequently identified as barriers to finding paid work experience. This should not be interpreted to mean that programs should ease their instruction in these areas, but it is rather perhaps an indication that training in these areas have been effective and should continue to ensue these barriers are minimized. This is especially important when considering that employer perceptions of the abilities of people with disabilities were a frequently identified barrier in this study, meaning that students who lack basic job skills may perpetuate this concern of employers.

Future Research

While this study provides information that can be translated directly into practice for those facilitating paid work experiences for student with IDDs in PSE programs, there is more research necessary to better understand how to support these opportunities. Future research should focus on identifying strategies used by PSE programs to minimize the barriers identified in this study. Although it is important to understand common issues when facilitating paid work experiences, understanding strategies employed by PSE program staff to increase paid work experiences for students may be especially useful. Valuable data could be collected by exploring the perspectives of employers who provide work experiences to students with IDDs enrolled in PSE programs. As PSE program personnel are generally reliant upon business owners and managers to provide work experiences, understanding their perspectives regarding barriers may also lead to an increase in opportunities for students seeking these experiences. Employers are a key component in this process and as such, hold information that can be potentially quite useful in this process.

Future researchers may consider exploring any potential relationships between PSE program characteristics. For example, research could explore factors such as such as the size of the college or university and the setting (e.g., rural, urban, suburban) on barriers for facilitating paid work experiences. Interview data from this study suggest that these relationships may have an impact on barriers to facilitating paid work experience, such as transportation issues. Several participants identified family or student concerns regarding the potential loss of disability-related benefits as a barrier to facilitating paid work experience. As this was confirmed by several interviewees, future research should involve an exploration of how this may impact paid work experience in PSE programs. Finally, research might also involve exploring how PSE program staff address family and student concerns over the potential loss of benefits and long-term strategies for managing this potential issue.

Conclusion

PSE programs for students with IDDs have become increasingly common in the U.S. Such programs provide opportunities students who would traditionally not otherwise have to access postsecondary education endeavors. In addition, PSE programs are valuable due to their potential to increase post-school opportunities for students with disabilities. While not all programs have a focus on career
development, most PSE offerings for students with IDDs have a goal of increased employment opportunities for program graduates.

In order to increase employability skills for youth with disabilities, many PSE programs feature paid work experience opportunities for their students. As PSE program staff are reliant on businesses (on-campus or in the community) to provide these authentic training opportunities, it is essential that they be aware of potential barriers to facilitating such experiences.

This study featured research exploring and describing common barriers to facilitating paid work experience. While this is only one component of a well-designed career development program, PSE program staff will be able to use this information to increase opportunities, and as such expand the employability of youth with disabilities.

Especially because PSE programs feature wide variances in program design and characteristics, understanding barriers to facilitating work is important. PSE program staff may use the information presented in this study to help design work experience programs that are well-aligned with the context of their own program. Increasing paid work experience opportunities for students in PSE programs can provide opportunities for members of this under-employed population to be employed in a meaningful way. Doing so not only benefits individuals with IDDs, but also provides an opportunity for the greater society to be even better through integration.

References


About the Authors

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Table 1

Descriptive Information About Interview Participants

<table>
<thead>
<tr>
<th>Region</th>
<th>Type of Institution of Higher Learning</th>
<th>Works with Vocational Rehabilitation?</th>
<th>Comprehensive Transition Program?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific</td>
<td>University</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>New England</td>
<td>University</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>University</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>West South Central</td>
<td>University</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Middle Atlantic</td>
<td>College</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Middle Atlantic</td>
<td>University</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>University</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Pacific</td>
<td>Community College</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>West North Central</td>
<td>University</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>East South Central</td>
<td>State PSE Hub</td>
<td>Yes</td>
<td>Yes/No (Multiple Programs)</td>
</tr>
</tbody>
</table>

*Note.* Regions based on US Census Regions and Divisions (U.S. Census Bureau, n.d.).
Table 2

*Barriers to Finding Paid Work Experience for Students Included in the Questionnaire*

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Not a Barrier</th>
<th>Small Barrier</th>
<th>Large Barrier</th>
<th>Critical Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our staff’s lack of training in integrated employment#</td>
<td>56.9</td>
<td>27.7</td>
<td>7.7</td>
<td>1.5</td>
</tr>
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<td>Our staff’s lack of training in customized employment#</td>
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<td>27.7</td>
<td>12.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Our staff’s lack of training regarding job development#</td>
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<td>21.5</td>
<td>9.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Inadequate number of staff hours to support students in the workplace#</td>
<td>38.5</td>
<td>24.6</td>
<td>13.8</td>
<td>18.5</td>
</tr>
<tr>
<td>Students' lack of job skills^</td>
<td>9.2</td>
<td>66.2</td>
<td>21.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Students' low self-motivation (lack of initiative)^</td>
<td>21.5</td>
<td>47.7</td>
<td>20.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Students' lack of self-responsibility (not trustworthy)^</td>
<td>40.0</td>
<td>49.2</td>
<td>7.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Students' low self-accountability (low quality control)^</td>
<td>30.8</td>
<td>49.2</td>
<td>15.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Students' problem behaviors^</td>
<td>44.6</td>
<td>43.1</td>
<td>7.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Students' poor hygiene^</td>
<td>41.5</td>
<td>50.8</td>
<td>4.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Students’ poor attendance^</td>
<td>38.5</td>
<td>55.4</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Students enter the program without adequate employability training^</td>
<td>13.8</td>
<td>49.2</td>
<td>15.9</td>
<td>13.8</td>
</tr>
<tr>
<td>Students enter program without adequate vocational assessments^</td>
<td>26.2</td>
<td>38.5</td>
<td>23.1</td>
<td>4.6</td>
</tr>
<tr>
<td>Finding time in the students’ schedule^</td>
<td>47.7</td>
<td>6.2</td>
<td>41.5</td>
<td>4.6</td>
</tr>
<tr>
<td>Transportation issues^</td>
<td>10.8</td>
<td>33.8</td>
<td>26.2</td>
<td>26.2</td>
</tr>
<tr>
<td>Students' low reading skills^</td>
<td>24.6</td>
<td>53.8</td>
<td>15.4</td>
<td>3.1</td>
</tr>
<tr>
<td>Students' low math skills^</td>
<td>26.2</td>
<td>56.9</td>
<td>10.8</td>
<td>3.1</td>
</tr>
<tr>
<td>Students' low-level of fluency with technology^</td>
<td>26.2</td>
<td>52.3</td>
<td>16.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Changes in management in businesses*</td>
<td>35.4</td>
<td>46.2</td>
<td>10.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Limited number of hours offered by employers*</td>
<td>20.0</td>
<td>46.2</td>
<td>20.0</td>
<td>7.7</td>
</tr>
<tr>
<td>Employers unwillingness to work with people with disabilities*</td>
<td>21.5</td>
<td>47.7</td>
<td>13.8</td>
<td>10.8</td>
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<tr>
<td>Employer perceptions of the abilities of people with disabilities*</td>
<td>15.4</td>
<td>32.3</td>
<td>24.6</td>
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</tr>
<tr>
<td>Employer concerns regarding accommodations*</td>
<td>20.0</td>
<td>47.7</td>
<td>18.5</td>
<td>7.7</td>
</tr>
<tr>
<td>Layoffs due to seasonal work*</td>
<td>58.5</td>
<td>20.2</td>
<td>12.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Lack of paid jobs in the area*</td>
<td>43.1</td>
<td>27.7</td>
<td>10.8</td>
<td>13.8</td>
</tr>
<tr>
<td>Concerns of family members@</td>
<td>26.2</td>
<td>47.7</td>
<td>15.4</td>
<td>7.7</td>
</tr>
<tr>
<td>Over-involvement of family members@</td>
<td>18.5</td>
<td>46.2</td>
<td>21.5</td>
<td>10.8</td>
</tr>
<tr>
<td>Under-involvement of family members@</td>
<td>26.2</td>
<td>52.3</td>
<td>16.9</td>
<td>4.6</td>
</tr>
</tbody>
</table>

*Note. n=65; # = staff factor; ^ = student factor; * = business factor; @ = family factor*
Inclusive Community Service Among College Students With and Without Intellectual Disability: A Pilot Study

Alexandra Manikas¹
Erik W. Carter¹
Jennifer Bumble¹

Abstract

Although community service is a widespread practice in most higher education institutions, few studies of inclusive community service experiences have appeared in the literature. In this pilot study, 10 college students with and without intellectual disability worked together to jointly plan a community service project, carry it out, and reflect upon their experiences. Qualitative interviews with and observations of participating students and staff revealed several important findings related to their perceptions of the experience, the nature of students’ interactions, and suggestions for future inclusive service opportunities. We present ways for structured, inclusive service experiences to be incorporated more fully into the collegiate experience for students with intellectual disability.

Keywords: Students with disabilities, postsecondary education, inclusive programming, higher education, intellectual disability, community service

Legislative and policy support for the creation of inclusive postsecondary education (PSE) programs has made it possible for increasing numbers of young adults with an intellectual disability (ID) to access collegiate experiences alongside students without disabilities (Kleinert, Jones, Sheppard-Jones, Harp, & Harrison, 2012; Newman, Wagner, Cameto, Knokey, & Shaver, 2010). Over 260 inclusive PSE programs now exist at technical schools, colleges, and universities across the United States (Hart, 2017). The rapid growth in both enrollment and programs has been fueled by federal funding for model program development, the establishment of a national technical assistance center, and emerging research addressing the benefits for students with ID who participate in these programs. As the inclusive higher education movement expands in reach, key questions surround what it means to support students with ID to access all aspects of the college experience (Carter, 2017). Campus life encompasses a wide range of activities—the courses students take, the internships and jobs they hold, the organizations and clubs they join, the campus programs and resources they draw upon, and the social events and relationships in which they participate. The importance of supporting access to this breadth of experiences is firmly advocated within prevailing standards and best practice recommendations (Grigal, Hart, & Weir, 2012, 2013).

One aspect of campus life that has received limited attention in the literature is the area of engagement in inclusive community service. Since the National and Community Service Act of 1990, service has increasingly incorporated into the mission, vision, and values of higher education. Institutions have adopted a variety of approaches to increase service opportunities (e.g., creating community-engagement offices, coordinating days of community service, connecting students to diverse volunteer and philanthropy opportunities in the community, offering service-learning courses). For example, as many as 45.5% of college students participate in some form of community service (Campus Compact, 2016). Indeed, an array of academic, social, and personal benefits have been documented for college students participating in a diverse range of service experience (e.g., Astin & Sax, 1998; Celio, Durlak, & Dymnicki, 2011; Smith et al., 2010).

Unfortunately, young adults with ID often have limited involvement in these important community service experiences (Lindsay, 2016). Findings from the National Longitudinal Transition Study-2 indi-
cate only 13% of students with ID (ages 19-23) completed a volunteer or community service activity in the past year (Sanford et al., 2011). Although early findings from an evaluation of model demonstration projects funded by the Office of Postsecondary Education found that 45% of students with ID participated in some type of volunteering or community service (Grigal, Hart, Smith, Papay, & Domin, 2017), the extent to which these activities were carried out as inclusive endeavors is unclear. The purpose of the present research project was to examine the experiences of students with and without disabilities who participated together in an inclusive community service experience. We designed this study to address three important gaps in the current literature on inclusive higher education.

First, little is known about how students with and without disabilities might benefit from their joint involvement in inclusive community service. Studies addressing the experiences of adolescents with disabilities and their peers suggest students may benefit substantively in areas such as social skill development, enhanced learning, increased self-determination and independence, personal growth, exposure to career-related skills, and new peer relationships (e.g., Burns, Storey, & Certo, 1999; Dymond, Renzaglia, & Slagor, 2011; Kleinert et al., 2004; Miller et al., 2002, 2003). Understanding this impact at the college level—where service opportunities may be more prevalent and inclusive experiences tend to be more limited—could lend support to the creation of new volunteer opportunities. Prior studies have not yet addressed the benefits students perceive for themselves and their peers as a result of their shared experience of serving others. Instead, available research has emphasized the benefits peers accrue from volunteering to serve students with ID on their campus (e.g., Farley, Gibbons, & Cihak, 2014; Griffin, Mello, Glover, Carter, & Hodapp, 2016; Izzo & Shuman, 2013).

Second, the interactions students have within inclusive community service experiences are important to examine. Research involving adolescents with and without ID indicates that students interact with one another quite differently depending on whether peers without disabilities are assigned helping roles versus similar roles relative to students with disabilities (Hughes, Carter, Hughes, Bradford, & Copeland, 2002). For example, Burns et al. (1999) documented very different experiences and outcomes among high school students who volunteered to support students with ID in a community activity versus students who served jointly within them on a community service project. Studies examining the perceptions of college students toward students with ID also reveal a wide range of attitudes and expectations that could influence the nature of students’ interactions with one another (e.g., Gibbons, Cihak, Mynatt, & Wilhoit, 2015; Westling, Kelley, Cain, & Prohn, 2013). Because prior studies have not included an observational component, little is known about the roles, reciprocity, and group dynamics that may be evidenced within an inclusive community service experience.

Third, the perspectives of students with and without disabilities are important to consider when designing new inclusive PSE experiences. Although a growing number of studies have solicited the insights of students with disabilities on topics such as a campus accessibility, accommodations, and self-advocacy (e.g., Agarwal, Moya, Yasui, & Seymour, 2015; Kurth & Mellard, 2006), few have included students with ID and none have addressed the design of inclusive programs. Qualitative studies involving interviews with adolescents with intellectual and developmental disabilities have provided valuable insights into the design of social-focused interventions (Bottema-Beutel, Mullins, Harvey, Gustafson, & Carter, 2015), leadership experiences (Carter, Sweedeen, Walter, Moss, & Hsin, 2011), and support models (Tews & Lupart, 2008). Additional efforts are needed to give greater voice to students with ID on issues related to higher education inclusion. As students with ID become more prevalent on college campuses, institutions will be called to increase opportunities for inclusion across all dimensions of the college experience, including community service.

The purpose of this pilot study was to examine an inclusive community service project for college students with and without ID. We sought to examine four research questions:

1. What benefits were perceived to accrue for students with ID?
2. What benefits were perceived to accrue for students without disabilities?
3. How did students with and without ID collaborate during the community service project?
4. What advice do participants suggest for creating more inclusive community service projects on university campuses?

Method

Participants

Primary participants were 10 university students with (n = 5) and without (n = 5) ID. Primary participants with ID were enrolled in a two-year, non-residential PSE program which required students (a) be 18-26 years old; (b) have a diagnosis of ID; (c) have
completed high school and received a standard or alternate diploma (i.e., occupational or special education); (d) not meet eligibility requirements for admission into a standard college program, and (e) exhibit adaptive communicative and functional skills. Participants without disabilities were enrolled as traditional university students. These peers ranged in age from 18-22 years ($M = 19.7$). Ethnicity, gender, and year in school varied across these peers (see Table 1). These primary participants are referred to as “students” throughout the remainder of the article. Secondary participants included the career director for the PSE program and the volunteer coordinator from the service site (i.e., a memory care facility; see Table 1).

**Settings**

Two group meetings—one before and one after the service phase of the project—took place in a campus classroom. Students sat at rectangular tables, engaged in small and large groups, and attended to presentations projected on a large screen. Facilitators served light snacks at both meetings. The service phase of the project occurred at a local residential memory care facility, serving individuals with Alzheimer’s disease and other types of dementia. Prior to meeting with residents, students and the PSE career director met in a large conference room with the volunteer coordinator from the service site to discuss service logistics. The volunteer coordinator also provided a brief tour of the facility. Students met with residents in a multi-purpose area where they typically host guests, take part in group exercises, and participate in diverse leisure activities.

**Recruitment**

Study procedures were approved by the university’s Institutional Review Board. All students with ID enrolled in the PSE program were sent a recruitment email and flyer by the PSE program director outlining the study goals and time commitment. Students with ID expressed interest in the study to the program director and the primary researcher, and then we obtained consent. Undergraduate students without disabilities were primarily recruited through emails with electronic flyers and basic study descriptions, and through in-person presentations. Because our intention was to include students who were not connected with the PSE program, we first recruited only from the campus community service organization listserv. However, due to low response levels, we extended our recruitment to students serving as peer mentors within the PSE program and students pursuing a special education degree. We conducted this recruitment via emails and in-person; however, in-person recruitment was most effective.

**Inclusive Community Service Project**

At the outset of the project, the PSE director chose the focus of aging adults based on previous community service work conducted by the students and the goals of service program. The structure and design of the project drew upon the general structure of a service-learning framework, including: planning and preparation, action, and reflection and celebration (Dymond, Renzaglia, & Chun, 2007). Unlike traditional service-learning, however, the experience was not anchored to an academic course, did not involve students in all aspects of service planning, and was designed with a shorter duration. Although we planned to have four sessions, scheduling challenges required us to condense these phases into three sessions.

**Session 1: Planning and preparation.** Participants gathered for the planning and preparation session in a university classroom. The PSE career director facilitated the first 90 minute session for 11 students (following this session, one student without disabilities left the study due to a scheduling conflict). We held a brief meeting with the facilitator prior to the session to relay our session objectives and review materials (i.e., lesson plan and PowerPoint presentation). The session began with short introductions. Students then engaged in a large-group discussion to address three questions (a) what do you already understand about the population you are serving (i.e., aging adults), (b) how will you work together to provide a service for the community, and (c) what do you hope to gain from this service experience? The facilitator then shared ways to support and communicate with aging adults with Alzheimer’s disease and other types of dementia.

This large-group instruction provided a foundation for subsequent small-group discussions about possible pathways for the service project including planting and gardening, group exercise, art therapy, and group games/activities. These options were based on recommendations from the volunteer coordinator at the service site. Each small-group shared their project preferences, and together the students came to consensus on the group exercise service project. This project included a list of several options for service, and students chose to engage in seated balloon volleyball. They selected an exercise basics class as a backup activity. Students then discussed and assigned roles they would take on during the service project (e.g., referee during the game, assist with setup) and set personal service goals (e.g., be reliable, be there with a smile).

**Session 2: Action.** One week later, after planning the service project at the first session, all 10 students completed the action phase of the project. Session two was 75 minutes and took place at the memory
care facility. Two staff from the PSE program and two university graduate students provided transportation and background supports (e.g., moving students from one area to another, retrieving materials). Upon arrival, the volunteer coordinator led students through a short orientation about volunteering, spoke briefly about strategies to effectively engage with residents, provided a brief tour of the facility, and talked through the logistics of the group exercise activity. As part of seated balloon volleyball, students passed balloons back and forth with residents as they were seated, interacted with the residents, and retrieved balloons that fell out of reach. Although students chose individualized roles (e.g., referee, set-up) during the planning and preparation phases, these roles were not as clearly defined by the service site, requiring students to step in and out of roles as requested by the volunteer coordinator. After approximately 30 minutes, the volunteer coordinator introduced the exercise basics class. Although students did not expect this activity (i.e., it was previously identified as only a back-up activity), they remained flexible to the needs of the service site, and quickly assembled as a group to decide how they would conduct the class. Students stood at the front of the room and modeled simple exercises for the residents (e.g., raise your arm, lift your leg). Each student led the group in at least one exercise. Students closed the activity with meditation and breathing exercises. At the end of the session, the volunteer coordinator provided time for students to socialize and connect with residents one-on-one.

Session 3: Reflection and celebration. One week after the service activity, students met to reflect on and celebrate their community service project. The primary researcher facilitated session three in the university classroom. The session lasted 34 minutes, and was attended by six students (three students with ID, three students without disabilities). Four students could not attend due to conflicts (e.g., illness, work schedule). To start the session, students engaged in a large-group discussion with guiding prompts to reflect upon the service experience and celebrate their efforts. Reflection prompts were: (a) what did you learn from this experience, (b) how do you feel that this service experience impacted you, and (c) how will you apply your experiences to all areas of your life? Celebration prompts were: (a) let’s talk about some of the best parts of this project and (b) let’s talk about the whole service experience. In addition to these prompts, students participated in a hands-on reflection activity called a “graffiti wall,” in which they had the opportunity to creatively express their thoughts about two questions in the form of drawings, poems, or sayings (a) why serve others? and (b) any thoughts about this service experience?

Data Collection

Sessions. We documented the three sessions using field notes and audio-recordings. The primary researcher recorded field notes during all three sessions. Across sessions, field notes included observations on the (a) atmosphere, (b) participants’ level of engagement, (c) dynamics of any small- or large-group discussions or activities, and (d) any challenges that were encountered. During session two, field notes were expanded to include student interactions with each other and with residents, and any supports that were provided to students during the service project (e.g., assistance reading exercises, prompts to speak louder, encouragement to join in the service activity). We audio recorded the first and third sessions to examine student interactions.

Individual interviews. Following session three, the primary researcher completed interviews with nine students, the service site volunteer coordinator, and the PSE career director; we were unable to reach one student with ID via phone or email (see Table 1). Interviews were conducted over a three-week period at times chosen by participants. Interviews ranged from 16 min to 62 min (M = 32). Nine interviews took place in-person on the university campus, one interview was conducted by phone, and one took place at the service site. Each interview was audio-recorded. Audio-recordings were transcribed, checked for accuracy, and de-identified by the research team.

We developed four, distinct semi-structured interview protocols for students with ID, students without disabilities, the volunteer coordinator, and the PSE career director (available from the first author). All protocols included questions about participants’ backgrounds, prior volunteer experiences, views on community service and the service project, and how their perceptions of service or aging adults might have changed over the course of the project. Participants without disabilities, the PSE career director, and the volunteer coordinator protocols also included questions about the impact of the experience and the community’s capacity for more inclusive service experiences. Additional protocol distinctions were questions about the memory facility and its mission (volunteer coordinator); questions about future plans to continue volunteering and lessons learned from the service project (students with and without ID); and perspectives about the service experience (students without disabilities).

Data Analysis

We coded each interview transcript—as well as the transcripts and field notes from the reflection and celebration meeting—using a constant comparative approach (Strauss & Corbin, 1990). After an initial
review of the data, the primary researcher and a faculty advisor met to develop three broad coding categories including (a) perceptions of different participant groups on the impact of the experience; (b) the nature of participant interactions within an inclusive setting; and (c) advice for creating more inclusive service opportunities. Using these initial coding categories, the primary researcher independently coded four interviews, creating subcategories and definitions based on emerging themes from the data. Coded items and their definitions were reviewed by the faculty advisor, who provided feedback and edits to clarify the coding scheme. We repeated this process with the remaining eight interview transcripts and the session transcript to develop a final draft of the coding scheme. Then, we shared this coding scheme with a doctoral student familiar with inclusive service projects who provided peer debriefing and critique. Final edits were made through consensus of the primary researcher and faculty advisor.

Throughout data collection and analysis, we used multiple strategies to support the trustworthiness of our findings (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005; Lincoln & Guba, 1985). Prior to data collection, the lead researcher developed relationships with the PSE staff and students and learned about the program’s day-to-day operations. Advanced contextual understanding from these field experiences informed our approach to recruitment, data collection, and analysis. We used two types of triangulation—multiple data sources (i.e., interviews, field notes, audio-recordings) and multiple investigators—to examine how findings converged and diverged across sources. We reduced bias by employing a team-based approach to coding and a peer debriefer in the final stages of the process. We maintained an audit trail of raw data (i.e., audio-recordings, project artifacts, field notes) and analysis products (i.e., iterations of the coding scheme, meeting notes, coding memos) documenting our analysis process.

**Results**

We draw upon our interviews, transcripts, and field notes as we present the primary themes aligned with each of our four research questions.

**What Benefits were Perceived to Accrue for Students with ID?**

We identified seven areas of benefits for students with ID participating in this inclusive community service experience. We describe each below and illustrate with participant quotes.

**Took on new service roles.** Three students with disabilities and one student with ID discussed a shift in roles as students with ID became the ones serving in their community (versus the ones being served). For example, Isabel described a natural role reversal that took place, “That’s not a type of activity they might typically do, like being the ones who get to go out and help others. And so now, hopefully in the future, they’ll want to continue doing different types of service.” Ron, a student with ID, described how this service project helped him “experience things that you [he] never um experienced before,” about aging adults. In addition, two students without disabilities described how volunteering helps students with ID challenge society’s stereotype that they are always in need of help. Lucy affirmed this role reversal and potential for inclusive service experiences to empower all people:

Right, so they’re the ones who like are usually seeking help and who need to be helped…and so perhaps they would think that they can’t be the ones that’re helping…so I think that it’s so important for them to see that that’s not true…like anyone really whatever condition you’re in in life, you can always reach out to someone else and lay, lend a helping hand, so I think it was just great for them to see that you know they can go and hang out with the elderly and truly create like such an amazing impact.

**Experienced the satisfaction of serving.** One student without disabilities described her own feelings of enjoyment and excitement as students with ID served and impacted their communities. Lucy discussed how happy students with ID were when they saw residents smile and enjoy their company. She also explained how the benefits of the experience were felt equally by all students:

I don’t think there’s a difference in how they [students with ID] see it and how we see the impact of it, I think it’s just again seeing that you know, you can bring like…a smile onto someone else’s face, I think everyone gets to feel joy from that…if you have a disability or not.

**Developed self-determination skills.** Students found that the inclusive experience allowed them to build their leadership skills and be more independent. One student without disabilities, Grace, discussed how the experience provided students with ID the confidence necessary to lead and carry out the project. She talked about the leadership opportunities embedded throughout the project’s planning and implementation mentioning:
I know a couple of students voiced opinions about like what, like what type of service like we wanted to do and gave really good justifications for like why they thought that that would be...helpful for the residents for us to like do this kind of service.

Eric, a student with ID, expressed the enjoyment of getting to complete activities independently, as he led group exercises during the service project and interacted with the residents at the end. He felt he impacted the residents by “getting to interact with them, getting to be a part of their life, and getting to make them feel good about themselves.” The PSE career director felt these opportunities to gain self-determination skills helped students feel empowered to create change and make a difference in their communities, stating:

I would think that it was probably really empowering for them, just because they pretty much got to be in charge of what we did and got to be the ones helping others. And where like the residents would look to them for anything that they needed.

**Formed relationships with new peers.** Some students suggested that the relationships were more likely to develop because the project was a student-led activity done with fellow students, as opposed to being a class requirement with teachers present. Caitlin suggested, “if [the students with ID] have done service before, it might have been with family or friends from church...it might not have necessarily been friends from college, which is definitely a different experience.” She further explained the nature of working alongside same-age peers when she said:

So like volunteering just with your same-aged peers is, is really exciting. It’s like, okay, my friends are doing it, everyone’s doing it, it’s cool, it’s fun, we’re all doing it together, that’s part of what makes it so cool and fun.

**Built and refined social skills.** Three students mentioned the impact of the interactions, dispositions, and attitudes of their peers as they served. Students with ID discussed learning from their peers who had experience with aging adults and knew how to interact with them. One student with ID, Eric, who we observed as initially hesitant to join the service activities, mentioned that watching his peers interact with the residents helped him learn how to do the same. Ron, another student with ID, noted how he was impacted by the general dispositions and attitudes towards aging adults shown by the other student volunteers when saying, “I thought that the other...service members, I thought they really did show a lot of affection, more understanding towards them [the residents] when they [the other volunteers] were speaking to them.” Chris, another student with ID, noted that he learned how to “have a good time” and enjoy the service experience from being with other student volunteers. The PSE career director also discussed how the inclusive service experience allowed students with ID to use and refine their social skills in a real-life setting to meet new people, engage in conversations with peers and residents, and navigate group dynamics and interactions.

**Learned about differences and diversity.** Both the PSE career director and the volunteer coordinator mentioned the capacity of students with ID to perceive, understand, and become comfortable with different characteristics and modes of communication used by the residents they served. For example, Nancy stated, “I don’t know how often they would see somebody...who might not be able to talk or might not be able to sit down or something like that.” In both cases, Nancy and Anna acknowledged that the service experience allowed students with ID the opportunity to interact with and understand a population different from them.

**Connected service to personal experiences.** Students were able to connect the service experience with their family members, aging adults in the community, and their own strengths. All students with ID explicitly mentioned connections they made between the service project and their own family members who were either aging adults or had Alzheimer’s disease. Students without ID observed this as well. For example, Nancy said, “I know one [student with ID] said ‘well I go to my grandmother’s house you know all the time on the weekend and you know I spend the night and you know she cooks,’ and so I think there was some connection.” Beyond family connections, students with ID learned about how they might treat others and their positive qualities that surfaced through the experience. Eric discussed the idea of mutual respect when interacting with aging adults, and even talked about the impact of his interactions with aging adults “it put me in my spot to tell me and then remind me about things that I need to be aware of in life.” Ron focused on the qualities he discovered about himself throughout the experience: “how kind I am, understanding, and definitely giving them affection...and showing them that I am listening, I am here.”
What Benefits were Perceived to Accrue for Students without Disabilities?

We identified three overarching benefits for college students without disabilities participating in this inclusive community service project.

**Learned about strengths and abilities.** All students without disabilities and the volunteer coordinator described increased recognition of the abilities and strengths of students with ID as a result of this experience. Students said they were reminded throughout the experience that students with ID are “capable of serving” and “are not always like the population that should be served.” Isabel shared that the project really “was just shining a light on the fact that…they can do just anything that anyone else can do.” Other students did not change their views about the capacity of students with ID to serve, but did emphasize how the experience helped reinforce what they already believed. Caitlin said, “I knew that people with disabilities can definitely engage in service and be wonderful volunteers.” In addition, Jenny noted that “I didn’t really have this notion that they can’t serve…but this service project really, kind of gives us the, like concrete…thing that yeah…they have disabilities, but they still have a lot more.” The service site staff member said she was influenced by the interactions she witnessed and felt that “students without disabilities…were impacted seeing the students with disabilities working with the residents,” thereby showcasing their abilities.

**Developed a passion for inclusive programming.** Two students without disabilities discussed the need for more inclusive service experiences and recognized opportunities for their development on campuses and in the community. For example, Jenny said:

> we still have so many different areas, like that maybe you can contribute…to other people, to other communities, so…I think it’s something that should’ve happened a long time ago, but like it’s great that it’s…happening right now.

Jenny also highlighted why inclusive experiences were so important, noting “it was the first time I got to see firsthand…them serving so I guess they kind of, I expected them to be successful with it, but it was cool actually getting to see it.” Another student described how the project would have been different if students with ID had been the recipients of service or served exclusively by themselves. This same student explained that service is not typically an activity shared between students with ID and students without disabilities as part of the PSE program, so this service experience provided exposure to a new activity that could be shared between students. Caitlin, a student without a disability, expressed that having gained firsthand experience, she could advocate for their success:

> and now I can say that, I have seen them, I have been a participant in an inclusive service experience and seen that unsurprisingly it was, it was wonderful and benefited not only the people we are serving, but the [PSE] students and [students without disabilities].

She also felt confident that when given an opportunity in her life to speak up for new opportunities for community organizations or schools, she would be able to suggest inclusive service and all its benefits as a potential activity.

**Learned about benefits of collaboration.** Three students without disabilities discussed the equal, collaborative nature of service they witnessed. Jenny talked about how her views of service as a collaborative effort were confirmed through her participation:

> I have this, idea like that service is supposed to be like more collaborative, more like equal…like in terms of respect…but this experience really showed, like proves that it, it can be that way, and it should be that way.

When asked if the inclusive nature of this service experience made it different, other students discussed how they “didn’t notice that big of a difference.” Lucy talked about how all students who attended the service project were eager and “willing to help,” and “no one was complaining” about the service. Isabel specifically discussed how students with ID “were really helpful and knew what they were supposed to do.”

The PSE career director specifically discussed the potential impact on students without disabilities as they worked to include and interact with students with ID during the planning portion of the project. Anna talked about the effective strategy of ensuring students with ID and students without disabilities were mixed in groups during the planning session. She noticed that students from both groups exhibited “smiles and patience.” She discussed the impact on students without disabilities when she said:

> It gave the students…without disabilities an opportunity to learn…new ways of…approaching teamwork and um, you know approaching a situation with someone that may have limitations in certain areas.
How did Students with and without Disabilities Collaborate During their Community Service Project?

Interviews and field notes highlighted three areas of inclusive student engagement.

Group dynamics. Participants discussed the dynamics of the service group as students came together to plan and engage in the service project. Multiple students and staff discussed the level of engagement, collaboration, equality, and cohesiveness that contributed to the team working together. Teamwork was evidenced during the planning session, as Grace described how students were “working together to find...the majority vote” on which type of service project they wanted to engage in. Students then collaborated to refine the nature of their volunteering experience by “planning...which type of exercise we all wanted to do and...assigning roles.” The university staff member thought students without disabilities learned “new ways of...approaching teamwork” during planning by working in inclusive groups and the service site staff member spoke about one student with ID who “got the group together...in a little huddle, and decided okay—this is what you’re gonna do, then you’ll do this one, so who’s gonna go first” during group exercise. Field note observations also captured this moment of spontaneity, as it was noted how students had to think on their feet to organize the group exercise.

In addition, two students with ID and one student without disabilities described the pride and unity they felt because they were serving with a supportive, familiar group. Eric noted that because of his interactions with other student volunteers, he “got to have fun with them...got to just be a part of them” and felt more a part of his university campus as a result. Ron said, “I thought that the other...service members, I thought they really did show a lot of affection, more understanding towards them...I definitely felt more...proud that I was part of this project...and just working alongside with the others.”

Student roles. Several students talked about the roles they took on to ensure meaningful interactions and friendships emerged during the experience. One student with ID referred to volunteers without disabilities as “peer mentors” and described how he, “met like...different people that were in the, that're our peer mentors or...they’re helping me in the project...” Students without disabilities expressed a different view of their relationships with students with ID. Grace felt that she took on a “peer” (versus helper) role because she thought all students “were like learning together and like working together to like figure out how to best serve that population.” Caitlin affirmed this view by expressing that when working with people with disabilities, she is “there as a friend” and then provides help if necessary. Isabel was the only participant to mention the theme of acting as a role model. She said that during the project she “just wanted to be sort of a model of what they [students with ID] should be doing.” She observed that, some of ‘em at first weren’t as...eager I guess to maybe go up and either talk to the residents or go play volleyball with them...or speak loudly when um reading off the exercises...so I wanted to be sort of that model of that like, “It’s ok, this is what you should be doing,” like for them to look to.

Reciprocal support. Four students without disabilities and one student with ID talked about the help and support provided by the group Chris, Grace, Lucy, and Isabel discussed the exercise portion of the service project and how volunteers received help and support from each other, especially when reading the list of exercise activities to the group. For example, Chris said, “if one of us couldn’t speak up...louder, then another person, one of our friends, will help us speak up clearly...to understand the echo in the room.” Grace added, we “all kind of helped each other like find where we were in the class ’cause we had all of the instructions on a list.” Isabel also spoke about how volunteers helped each other during the balloon volleyball game. She described times when participants would notice residents sitting in “an area that needed...someone to go over and play,” and would suggest for other participants to move around to those areas and keep those residents engaged. Caitlin noted her support of other volunteers, as she “would toss...a balloon to other peer mentors” who she felt needed a push to be more engaged in the project. Finally, field note observations of the service project confirmed students without disabilities assisted students with ID in reading some of the exercises and that some students had to be prodded to engage all residents in the group exercise and to speak loudly.

What Advice do Participants Suggest for Creating Inclusive Community Service Projects?

All participants offered some insight regarding the feasibility of inclusive programming, and suggestions for creating more inclusive service opportunities on campuses and in the community. Four themes were identified: (a) provide meaningful planning and follow-up opportunities, (b) link to educational experiences, (c) specific design of inclusive programming, and (d) involving the community in inclusive efforts. These recommendations, along with definitions, are displayed in Table 2.
Discussion

Community service is prevailing practice in most institutions of higher education (Campus Compact, 2016). Despite high levels of student participation and the myriad benefits of service experiences, inclusive volunteer experiences involving college students with and without ID are not well represented in professional literature. This study extends the literature on inclusive community service experiences in several important ways.

First, students with ID are positively impacted by engaging in community service, can offer important perspectives on their service experiences, and learn important lessons through volunteering. This is important to emphasize because students with ID are so often viewed narrowly as the beneficiaries of service (Burns et al., 1999; Olnes, 2008; Van der Klift & Kunc, 1994). However, this study highlights the considerable benefits students with ID experience when given the opportunity to serve others. Students with ID discussed the myriad ways they were personally impacted by the service experience, such as opportunities to develop self-determination skills and learn through their interactions with peers. All of the students with ID also spoke about the lessons they learned about service and aging adults (e.g., having mutual respect, being reminded to serve others) and identified personal connections to this issue. Such findings extend a small, but growing, body of literature describing the important impact serving can have on individuals with disabilities (Carter et al., 2011; Lindsay, 2016). This study affirms the importance of creating opportunities for students with ID to engage in service, as well as to design these experiences to be inclusive so all students can learn from and alongside one another.

Second, inclusive service projects may provide a platform for shifting the focus from deficits to strengths, from the challenges students with ID experience to their achievements. This focus on ability is crucial because it can change how individuals with ID are perceived (Carter et al., 2015). In the present study, all of the college students without disabilities had prior experience with individuals with ID; thus changes in perspectives were raised by only some of the students. However, they all reported being reminded about students’ capabilities and indicated this experience reinforced and confirmed their beliefs that individuals with ID have important gifts to bring to their communities. Other studies have shown the effectiveness of explicitly designed opportunities to create contact between individuals with and without disabilities characterized by optimal frequency and duration, a sense of equality, prior history of exposure to individuals with ID, and quality interactions (Santiago, Lee, & Roper, 2016). Moreover, future inclusive service experiences should be explicitly designed so students who do not have prior exposure to individuals with ID might benefit from these experiences and develop meaningful relationships with diverse peers. In addition, the potential attitudinal changes that might be associated with this reciprocal form of engagement should be explored in future studies.

Third, inclusive service projects have the potential to expose all students to new experiences as they meet community needs alongside one another. Such experiences can be especially important for students with ID, who enroll in PSE programs to access the benefits of typical college experiences (Kleinert et al., 2012). In the present study, volunteering was identified as an avenue for students with ID to participate in typical campus experiences alongside their fellow college students. In addition, students without disabilities discussed how serving alongside students with ID provided them new ways of spending time with these peers—not as mentors, but in more balanced and reciprocal ways. In light of these mutual benefits, inclusive volunteering should be incorporated more frequently into inclusive PSE programming.

Fourth, additional refinements may be needed to promote the equity and reciprocity that characterize truly inclusive experiences. Consistent with past studies, most participants discussed how all students assumed similar roles and worked with equal collaboration (Burns et al., 1999; Dymond et al., 2007). In addition, most participants described the teaming as effective and described the students with ID as either peers or friends. However, one student with ID still viewed his partners as “peer mentors” who “helped” him during the project. Likewise, one student without disabilities talked about being a “role model” for students with ID during the experience. These descriptions suggest additional efforts may be needed to further support balanced roles and interactions throughout the service project (Van der Klift & Kunc, 1994).

Fifth, inclusive community service experiences should be explicitly designed to include preparation and follow-up sessions that are accessible to all students and provide support as they take ownership of their project. In addition, community awareness and education may need to be created lasting partnerships and connections that allow students opportunities to volunteer over time. These suggestions important because they offer a certain structure to service opportunities in order that they are reproduced and easily programmed into inclusive PSE settings. In addition, they were provided by individuals who
participated in this experience. Participants identified diverse ways to structure these experiences, connect them to educational opportunities, provide planning and follow-up opportunities, and involve the community in these efforts.

Limitations and Future Research

Several limitations to this study should be addressed through future research. First, all students without disabilities had prior volunteer and work experiences with people with disabilities and served as peer mentors in the campus’ inclusive PSE program. Future studies should recruit college students who have limited or no prior experience with individuals with disabilities to better understand how the experience shapes their views and outcomes. For example, the volunteer coordinator, who had limited experience seeing individuals with disabilities serve at the memory care facility, shared how her perceptions had changed as a result of the service project, and noted that her organization needed more education to understand the benefits and importance of inclusive service.

Second, despite incorporating some elements of a service-learning framework, this study did not fully reflect a service-learning experience. Due to the design of the PSE program, students in this study did not all share similar classes or access the same academic material, so the common curricular connection required of typical service-learning experiences was not met. In addition, due to the time constraint placed on the study, students were unable to plan all aspects of the entire experience, instead taking ownership in selected aspects of the planning. Moreover, service-learning experiences are typically longer in length and provide more extended opportunities to plan, serve, and reflect. Future research should focus on embedding service-learning projects in inclusive college courses taken by students with ID.

Third, the duration of the service project itself was fairly short and involved a one-time experience. Although some studies have shown short-term service projects can still yield numerous benefits for students (Dymond et al., 2007; Reed, Jernstedt, Hawley, Reber, & DuBois, 2005), some participants (along with the service-site staff member) saw value in pursuing more consistent and longer-lasting opportunities. One planning session, service project, and reflection session, may not have been enough time for participants to get to know one another and learn about each other’s strengths and interests. In addition, a one-time service project does not allow volunteers to establish long-term relationships with the people and organizations they serve. Future researchers might develop inclusive service projects at the collegiate level that span entire semesters.

Fourth, several students without disabilities spoke about the potential impact of inclusive service activities on the broader community, such as reduction in stigma related to ID, the role reversal that takes place when individuals with ID are the ones who serve, and the willingness of the community to be open to people with ID serving. Although we did not verify these perceptions by querying others at the service site beyond the volunteer coordinator, they do highlight an intriguing possibility for additional research. Future studies could take steps to capture potential changes in the understanding and views of people with ID among individuals who are the recipients of their service.

Conclusion

Inclusive community service experiences amongst college students with and without disabilities have not been well documented. This study shows how participating students benefited from being part of a volunteer experience in which students worked together to plan aspects of a service project, served aging adults in the community, reflected upon the experience, and shared their personal insights. The burgeoning number of PSE programs across the nation should strive to incorporate such inclusive experiences as part of curriculum classes or as structured, organized activities so that more students have opportunities to serve alongside their peers.
References


Table 1

Participant Demographics

<table>
<thead>
<tr>
<th>Role/Pseudonym</th>
<th>Age</th>
<th>Sex</th>
<th>Race</th>
<th>Disability</th>
<th>Major(s)</th>
<th>Types of Prior Volunteer Experiences</th>
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<tbody>
<tr>
<td><strong>Students</strong></td>
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<td>Disability studies/child development</td>
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<td>Chris</td>
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</tr>
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<td>Grace</td>
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<td>F</td>
<td>W</td>
<td>-</td>
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<td>Individuals with disabilities; youth</td>
</tr>
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<td>W</td>
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<td>Individuals with disabilities; youth; homeless</td>
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<tr>
<td>Jenny</td>
<td>20</td>
<td>F</td>
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<td>Early childhood education/second language studies</td>
<td>Individuals with disabilities; youth; literacy; education</td>
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<tr>
<td>Lucy</td>
<td>21</td>
<td>F</td>
<td>W</td>
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<td>Civil engineering</td>
<td>Individuals with disabilities; animals; youth tutoring; environmental; hunger issues</td>
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<tr>
<td>Maria</td>
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<td>M</td>
<td>W</td>
<td>ID</td>
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<td>Youth</td>
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<tr>
<td>Anna</td>
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<tr>
<td><strong>Service Site Volunteer Coordinator</strong></td>
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<td>Nancy</td>
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<td>W</td>
<td>-</td>
<td>-</td>
<td>Homeless; literacy; youth</td>
</tr>
</tbody>
</table>

*Note. A = Asian; AA = African American; W = White; ID = Intellectual disability; - = No disability; n/a = Not asked; ¹ = did not sit for interview; ² = special education minor.*
<table>
<thead>
<tr>
<th>Themes</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provide meaningful planning and follow-up experiences</strong></td>
<td></td>
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<tr>
<td>Preparation before service experiences</td>
<td>Inform and train students in order to create expectation, provide clarity, and foster relationships beforehand</td>
</tr>
<tr>
<td>Student ownership in planning</td>
<td>Utilize student voice and abilities during planning to increase their interest and involvement</td>
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<tr>
<td>Follow-up after service experiences</td>
<td>Provide opportunities for students to share their insights, highlights, and challenges about a service project following their experiences</td>
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<tr>
<td><strong>Link to education experiences</strong></td>
<td></td>
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<tr>
<td>Preparing for the workforce</td>
<td>Use a variety of service experiences as an avenue for career exploration while in school</td>
</tr>
<tr>
<td>Embed inclusive experiences into postsecondary programming</td>
<td>Adjust current postsecondary or community programming to reflect inclusive experiences</td>
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<tr>
<td>Early incorporation of inclusive programming in schools</td>
<td>Expose students to inclusive service experiences early on in school to foster a sense of inclusion that builds over time</td>
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<tr>
<td>Consistent opportunities for service</td>
<td>Create consistent community service projects as part of programming so students and beneficiaries develop mutual, long-lasting relationships</td>
</tr>
<tr>
<td>Use university resources</td>
<td>Use resources of university campuses in order to recruit and support inclusive experiences</td>
</tr>
<tr>
<td><strong>Design of inclusive programming</strong></td>
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<tr>
<td>Increase accessibility and support</td>
<td>Find ways to adapt service experiences and provide support to accommodate a wide range of abilities and needs</td>
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<tr>
<td>Align experiences to range of students’ abilities</td>
<td>Ensure that service experiences are a good fit for students by aligning experiences to students’ functional abilities</td>
</tr>
<tr>
<td>Provide structured service experiences</td>
<td>Structure service experiences to include explicit planning and organization</td>
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<tr>
<td>Hold equal/shared roles</td>
<td>Design inclusive service opportunities that give all students the opportunity to take on similar roles and interactions during all stages of the experience</td>
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<tr>
<td><strong>Involve the community in inclusive efforts</strong></td>
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<tr>
<td>Increase community awareness and education</td>
<td>Develop opportunities to increase the visibility of and inform the community about people with disabilities and their capacity to contribute and provide for others</td>
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<tr>
<td>Increase community partnerships and connections</td>
<td>Strengthen connections and partnerships between disability organizations and community service organizations</td>
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<tr>
<td>Advocacy from local and state organizations</td>
<td>Seek out local and state organizations to advocate for the feasibility, necessity, and success of inclusive service experiences in the community, and to assist in their formation</td>
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<tr>
<td>Meet community needs</td>
<td>Ensure inclusive experiences meet the needs of community organizations and that people with disabilities can meaningfully contribute to meet these needs</td>
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*Note. Themes in each subcategory are organized from most to least emphasized by participants.*
Physical Activity in Inclusive Postsecondary Education for Students with Intellectual Disability

Douglas Allen Roberts¹
Matthew Herring¹
Anthony Plotner²
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Abstract

There has been a growing commitment to the inclusion of students with Intellectual Disability (ID) on college campuses which has resulted in approximately 271 college programs in the United States. Although there is great variability on program structure and supports of these programs, their overall purpose is to assist students to prepare for productive and satisfying adult lives. The purpose of this study was to examine the inclusion of fitness and exercise components in the context of inclusive postsecondary education (IPSE) programs within the United States. Obesity is a major health concern, and people with ID are more than twice as likely to be obese than people without. Non-random purposeful sampling was used to interview nine staff members from different IPSE programs. Data indicated that both IPSE program factors and individual student characteristics may impact the role of exercise and fitness in IPSE. These findings can help guide the development of effective exercise and fitness programs for young adults with ID within the context of postsecondary education.

Keywords: Inclusive postsecondary education, intellectual disability, physical activity, obesity

Due to recent legislation (i.e., Higher Education Opportunity Act of 2008, PL 110-315), funding opportunities (i.e., Transition and Postsecondary Programs for Students with Intellectual Disability [TPSID] programs), and a growing commitment to increasing access to postsecondary education in general, there are now 271 inclusive postsecondary education (IPSE) programs across 48 states in the United States (thinkcollege.net). Inclusive postsecondary education programs aim to assist individuals with intellectual disability (ID) to prepare for more productive and satisfying adult lives, including meaningful careers and being as independent as possible (Uditsky & Houghson 2007). These programs vary greatly in the type of students enrolled and how services are delivered. Some programs allow for dual enrollment of students also enrolled in their K-12 school district, while others serve students who have graduated or completed their K-12 education. Inclusive postsecondary education programs also differ in whether the students live in university housing or commute to campus.

Grigal, Hart, and Weir (2012) categorized IPSE programs into three distinct models: hybrid, substantially separate, and inclusive individualized. The majority of programs in the United States are hybrid models that include classes and activities with students both with and without ID. Classes exclusively with other students with disabilities are often focused on gaining adaptive and daily-life skills and may be called “transition” classes. Substantially separate programs consist of classes only with other students with ID. Inclusive individualized programs offer support designed around each individual student’s needs which could include tutoring, peer mentoring, and specialized technology. Some IPSE programs prioritize academic achievement and career development, while others focus primarily on social and adaptive skills as target areas. In a survey of IPSE programs, 34% cited independent living skills as a primary focus, 32% cited employment, with only 18% citing academic achievement.

Inclusive postsecondary education programs aim to provide adults with ID the support they need to enjoy the full range of experiences available in postsecondary settings. As such, these programs are well-poised to address the issues of obesity, nutrition, and exercise in adults with ID. In fact, many IPSE programs have begun to examine needs and supports beyond traditional academic support. Specifically, there appears to be an increased awareness among IPSE

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programs that physical health and wellness can have a significant impact on academic performance and on the acquisition of new skills (Shore et al. 2008). Educators associated with IPSE programs have begun to consider how their roles might not be limited to academic instruction but may also include addressing health-related topics like nutrition, exercise, and other healthy lifestyle choices. However, as IPSE programs develop and implement these supports, there are a number of barriers that must be addressed including physical limitations, side effects of medication, and a lack of healthy food or exercise choices. Thus, research examining barriers and supports associated with optimal health and increased physical exercise for ISPE students is critical.

Although these programs are relatively new and the research is limited, initial data suggest that participation in IPSE programs results increased self-determination, job readiness and initial wages, and social skills (Grigal, Hart, Smith, Domin, & Weir, 2016). However, to date, no research exists that outlines the role of physical activity or exercise in these programs. The National Center for Health Statistics estimates that approximately 38% of adults living in the United States are overweight or obese which puts them at an elevated risk for adverse health outcomes including life-threatening conditions such as heart disease and stroke (National Center for Health Statistics, 2017). For individuals with ID, the rates of obesity are up to 58% higher than adults without disabilities, and obesity and lifestyle-related diseases negatively affect this population at alarming rates (Bandini, Curtin, Hamad, Tybor & Must, 2005; Slevin, Truesdale-Kennedy, McConkey, Livingstone, & Fleming, 2014). Obesity among individuals with ID represents a public health crisis, which has resulted in increased fitness and exercise promotion efforts targeting both prevention and reduction of obesity and obesity-related conditions (Neidert, Dozier, Iwata, & Hafen, 2010). A national blueprint has been issued identifying the need to improve the health of persons with ID. Physical fitness and obesity are two of the primary targets of this blueprint as adults with ID have lower fitness levels than their peers without. (Heller, Mc-Cubbin, Drum, & Peterson, 2011; Rimmer & Yamaki, 2006). In their systematic research review, Temple, Frey, and Stanish (2006) stated that nearly two-thirds of adults with ID did not fulfill the minimum physical activity level recommendations published by U.S. Department of Health and Human Services (HHS). Furthermore, the majority of time during the day for people with ID is spent doing sedentary activities, with only 13% of younger adults with ID meeting the HHS minimum recommendations.

Inclusive postsecondary education programs are in the unique position to incorporate exercise into their curriculum, and to assist this vulnerable population in overcoming barriers to fitness and exercise. Within a college or university setting, IPSE students theoretically have access to resources and opportunities that may not be available to other young adults with ID. Despite its importance, no studies have examined fitness and wellness promotion for individuals with ID within the context of IPSE. Exploring how IPSE programs are currently addressing fitness and exercise within their programs could serve to improve supports and programming for students with ID at colleges and universities across the nation.

The purpose of this study was to examine how fitness and exercise are being addressed within the context of IPSE programs within the United States. Specifically, two research questions guided the study: (a) to what extent is physical activity included in IPSE programming; and (b) what are IPSE professionals’ perceptions of facilitators and barriers to how IPSE programs facilitate students’ fitness and exercise?

Method

This project aimed to increase understanding of the how fitness and exercise is being addressed with students in IPSE programs. This information has the potential to guide the development of more effective exercise and fitness programs for young adults with ID within the context of postsecondary education. To accomplish this aim, semi-structured interviews were conducted with IPSE staff regarding the barriers and facilitators to addressing exercise and physical activity with students with ID.

Participants

A non-random purposeful sampling was used to obtain insights specific to IPSE programs (as opposed to the general population). Participants were recruited from the Think College website (http://www.thinkcollege.net/) that lists each of the IPSE programs in the United States. Think College at University of Massachusetts-Boston serves as the National Coordinating Center for Transition Postsecondary Programs for Students with Intellectual Disability (TPSID) projects. To be included in the current research study, participants needed to be twenty years or older, listed as the staff contact person for an IPSE program on the Think College website, and have been at their current position for at least one year. Administrators and staff members were chosen as these particular individuals allowed for the best chance to glean information related to the research questions. Interaction with participants was limited to a phone interview.
Of the 266 IPSE programs listed on the website at the time, participants were recruited from programs described as “residential,” meaning the program allows students with ID to live on the campus of a four-year college or university. This criterion was chosen because students enrolled at residential IPSE programs are more likely to be involved in a wider range of services. Of the 266 IPSE programs listed on the Think College website, 54 programs met the inclusion criteria. Using the contact information posted on the website (name, email, phone), an email was sent outlining the core components of the study and requesting an email response indicating interest in participation (yes/no). Of the 54 programs that were emailed, 13 responded. Of the 13 programs that responded, nine indicated that they were interested in participating in the study. For those who indicated they were interested in participating or who wanted more information, additional details were sent regarding the anticipated time commitment and specific study procedures.

In addition to the demographic information provided in Table 1, it is important to understand that although each of the participating programs met criteria to be an IPSE program, admission criteria and program goals somewhat varied. All of the programs accept students with mild to moderate ID, but one program exclusively admits individuals with ASD. With regards to individual program goals, three of the nine programs included “academics” as a program focus, seven of the nine programs included “independent living,” and eight of the nine programs included “vocational training.”

In analyzing ground theory interview data, Guest, Bunce, and Johnson (2006) reported that data saturation typically takes place at 12 interviews, therefore the goal was to interview approximately 10 to 12 participants. Ultimately, nine IPSE staff agreed to participate in an interview, which is consistent with recommended sample sizes for qualitative interview studies, which ranges from four (Romney, Batchelder, & Weler, 1986) to 30 participants (Creswell, 1998). The research team determined that a sample of nine meets the recommended threshold and that more interviews would produce risk of informational redundancy (Lincoln & Guba, 1985). To confirm this, the coded data was reviewed and determined that (a) the responses of the first seven interviewees were well represented with existing codes, and (b) new themes did not emerge in the final two interviews that were not already captured by initial codes suggesting that a larger sample size would result in data saturation.

Data Collection
The interview protocol used for this study was developed based on the literature and included a total of 11 questions, with additional follow-up questions contingent on participant answers (e.g., “If yes, how? If no, what are your reasons for not including this?”). The interview consisted of a set of four introductory demographic questions, questions regarding if and how physical activity is included in the program curriculum, and questions about barriers and facilitating factors in providing instruction and support in this area. Additionally, the final question included a rating scale from 1-10 at the end of the interview to extract information related to relative importance placed on fitness and exercise (i.e., “On a scale from one to 10, what level priority is exercise in your program?”). Table 2 includes sample interview questions. The interview questions were piloted with two professionals associated with IPSE programs (project coordinators) and then adjusted based on their feedback. Professionals working in or affiliated with IPSE programs across the country were targeted for study enrollment. The interviews were conducted via telephone and took approximately 30 minutes to complete. They were audiotaped and then transcribed to facilitate coding. A grounded theory approach (Flick, 2002) to qualitative research was adopted for analyses. This approach was advantageous when researchers seek to understand phenomenon and acquire in-depth information that is difficult to ascertain through more quantitative methods (Strauss & Corbin, 1990).

Procedures and Analysis
The research procedures were reviewed and approved by the university’s Institutional Review Board. The phone interviews were conducted in a private university office and audiotaped to allow later review and coding. The consent process was verbally explained to participants, and their consent was obtained over the phone at the outset of the interview prior to any data collection. All records were kept confidential and no personal identifiers (names and programs) recorded. If the participant mentioned their name or the program’s name during the interview, it was removed from the subsequent transcript. Each interview was given a unique pseudonym and all recordings were stored in a locked cabinet with no identifying information. The digital transcriptions were saved on a password-protected device. Only the people who worked on this study were able to access the data. The research team deleted the recording of the participants’ interview after transcription.

All of the interview transcripts were read and coded by the first and second authors. Specifically,
the data analysis steps provided by Strauss and Corbin (1997) were followed. Open coding to identify concepts categories and properties was first used, followed by axial coding to develop connections between each category and its sub-categories. The last step involved selective coding to integrate categories and to build a theoretical framework. After coding, theoretical sampling to confirm and sharpen the theoretical framework was conducted until theoretical saturation was achieved, which is “when the marginal value of the new data is minimal” (Strauss & Corbin, 1990, p.110).

As a result of this coding process, three category headings were generated from the data and the initial codes were assigned to one of the resulting themes. Following development of the coding scheme, two independent researchers who are not authors of this manuscript read the transcripts and verified the accuracy and representativeness of the thematic structure. After discussion with the research team, minor modifications were made to the thematic structure. Lastly, to ensure research credibility, member-checking was conducted, a technique used to help improve accuracy, credibility, and validity of a study by giving the data to the members of the original sample to check the authenticity of the work (Lincoln & Guba, 1985). Participants reviewed preliminary results and confirmed that they felt the results were accurate. By doing this, the goal was to determine if participants’ viewpoints were accurately translated into resulting theory (Krefting, 1991). In summary, several procedures were utilized before, during and after data collection to improve the trustworthiness of the data (Lincoln & Guba, 1985).

Results

In grounded theory research, a strong category system “emerges” from the data (Strauss & Corbin, 1994). After the data were coded and analyzed, three prevalent themes as to how IPSE programs address fitness and exercise were apparent: (1) Program Structure, (2) Challenges, and (3) Supports. Sub-themes within each of these were identified as well. Student-led choices and structured requirements were identified within Program Structure, individual barriers and systems barriers within Challenges, and peer involvement and program resources within Supports. The results are organized using these three primary themes and their subthemes. Prior to reporting the coded results, it was noted that several participants stated appreciation for this project. Furthermore, regardless of exercise and fitness implementation method, rigor, or formalization, data indicate that programs view health and wellness as an important construct within their program, with eight of the nine participants rating health and wellness at least a six out of 10 (1 being least important to 10 being of the utmost importance).

Theme 1: Program Structure

Of the major themes identified, program structure appeared to be the most salient in understanding the current role of fitness and exercise in IPSE programs. Consistently across IPSE programs, values such as self-determination and inclusivity were evident and emphasized. This is an important finding, as these are key components of an IPSE program and are considered best-practice within the ID literature (Griffin & Papay, 2017; Wehmeyer & Abery, 2013). Across the interviews, similarities in program structure were found that have yet to be investigated and are novel. For example, when asked about the level of parent/family involvement within fitness and exercise, nearly all programs reported a “hands-off model” with very limited parental involvement in order to best promote student independence. Interestingly, in stark contrast, the program that did involve parents was quite involved and extensive: “We send home progress reports and a monthly weight log. We think that social life is important and employment too, but you have to be healthy in order to live a life that is of high quality.” Overall, data indicated significant variability across programs in terms of general structure in delivering services, specifically the extent of autonomy students are afforded in determining their IPSE experience (i.e., student-led choices or structured requirements). Moreover, findings suggest that individual program structure drives the intensity of physical activity implementation.

More autonomous programs (focus on student-led choices). In a broad sense, student-led choices are decisions made by the individual student. Thus, in this study, student-led choices reflected participants’ responses that supported student autonomy and independence to make choices around fitness and exercise. A majority of the programs reported that they did not have a formalized fitness and exercise component within their IPSE program, and that the level of fitness and exercise activities that students are involved in is entirely up to the students. Participants reported that facilitating what students “want to do” is their primary responsibility when delivering services rather than requiring students to engage in specific activities. One program director noted, “we ask them what they are broadly interested in and help facilitate that, but they are not required to do anything related to health and wellness.” Another program director made a similar statement, “They have access to
all PE courses, but aren’t required to take them.” Although programs that structure their services around student autonomy may value health and wellness, they believe that the ultimate decision to engage in fitness and exercise activities decided upon by each individual student.

Similarly, some program staff reported that, although fitness and exercise activities are not required and participating is left up to the student, these options are specifically encouraged:

They have to choose from a list of electives each semester. It is mainly driven by them, with a little guidance. For example, if we know they have an individual goal to be healthier, we might say, “hey, look, snowboarding seems like a lot of fun.” So, it is softly encouraged, but not required.

Another program director commented, “we definitely encourage healthy routines.” Other program directors reported that although fitness and exercise activities are encouraged, they are not necessarily referred to during goal-setting and individualized planning. These narratives demonstrate respondents’ beliefs that promoting healthy behavior is important, but not to the extent that it interferes with the autonomy and self-determination of their students. These beliefs are reflected in the statements made by two program staff members: “student goals are completely individualized. If they want to be healthier, then we try to put them in a position to be successful, but it is in no way required” and “we encourage it in an indirect sense. We stress independent living (taking care of your own health) … goal setting in that way.”

Less autonomous programs (more structured requirements). In this study, structured requirements refer to fitness and exercise activities that the students in the program are required to do. These requirements can be in the form of classes, specific health activities within a general requisite, or hours of exercise per week. Although several programs had fitness and exercise components that were required as a program outcome or goal for all of their students, the type and level of requirements varied, and students had the ability to choose what activities to become involved in and whom to be involved with. As one director stated:

Health and wellness are tied to our program goals. One of our goals is that we would like each student to know how to be healthy and fit before they leave the program. Within that, we break that down and the students pick what that means to them and we make individual goals.

Another program director noted, “a fitness goal is always included as a part of their person-centered plan. Sometimes this looks like individual goals with their peer mentors such as, ’work out a certain number of times per week.’”

In addition to fitness and exercise activities being tied into program components, a few programs reported that all of the students have specific, required health goals that are measured and monitored throughout the year. These comments suggested respondents believe that if fitness and exercise were to be included in programming, it needed to be delivered in a structured and measurable way. Statements by multiple program directors reflect this sentiment: “we have a five day per week mandatory fitness/involvement;” “they are required to do two activities per weekend. Sometimes those involve exercise (Frisbee, walking to a football game);” and “students start off with a baseline at the beginning of the year and then try to beat it. We measure weight, resting heart rate, and stuff like that…85%-90% of goals are for a healthy lifestyle--nutrition, exercise, general knowledge.” Some program directors also reported that they have specific classes that all students have to take: “all students are required to take a Health and Wellness class during their first year.”

Theme 2: Challenges

In addition to program structure, challenges to having an exercise or fitness component also emerged as a theme from the data. Within this general theme, individual barriers and systems barriers materialized as specific subthemes. To identify a baseline of student physical activity in IPSE programs, each respondent was asked to estimate what percentage of students in their respective program are relatively active (relatively active defined as at least 30 minutes of exercise three to four times per week), and most of the programs estimated that 60% or less of their students are relatively active each week. With that said, two programs estimated 100% of their students were active.

Individual barriers. For this study, individual barriers to health and wellness referred to what specifically inhibits successful fitness and exercise promotion in for IPSE students. A number of respondents reported that student motivation was a significant barrier to having an exercise component in their program, with one respondent reporting, “a lot of students need prodding, which ends up creating difficult situations for us.” Other respondents echoed this sentiment, explaining how they often avoid including exercise activities because they make students feel uncomfortable, and they did not want to push stu-
respondents to do something that they do not want to do. One respondent shared that they had actually scaled back their level of exercise and fitness promotion in their program due to a lack of student motivation: “we don’t push exercise as much as we used to because of a general unwillingness to participate. Our program needs to learn how to do a better job persuading [our students] that exercise is important.”

In particular, some respondents reported that they believed this lack of motivation could be due to a lack of expectations for students with ID early in their social and emotional development. A few respondents cited secondary education as the source for a lack of expectations to exercise. One explained:

A big barrier that we have encountered is a lot of students were never exposed to physical activity in high school. It wasn’t an expectation for them. So, they really did have some habits and lack of motivation because it was a lot more fun for them to play video games during gym rather than exercise.

Another respondent mentioned that exercise is not included within Individualized Education Program (IEPs) as they should be, thus contributing to their lack of motivation:

I don’t think health and wellness is a big part of most IEPs. I think a lot of [lack of motivation] stems from the fact that nobody expected them to really participate in sports or do some of those things that other high school students are prone to do.

In addition to motivation, respondents noted that limited knowledge surrounding basic gym usage creates barriers. Respondents argued that without a foundational knowledge of how to use the equipment in the gym, exercise opportunities are greatly reduced. As one respondent noted, “another big barrier is a lack of knowing how to use the equipment. If they don’t know how to use the equipment, they are much less likely to work out.” Along the same lines, respondents reported that having students that do not know how to properly use the equipment at the gym leads to serious safety concerns. This is a major barrier, as one participant explained, “basic safety in the gym is a big thing that we need to address.”

**Systems barriers.** For this study, systems barriers referred to systematic barriers to exercise and fitness promotion that are not related to individual students within the program. For example, this theme includes general organization within the program, various program limitations, hierarchical challenges within the college or university, and financial constraints.

A common system barrier among respondents was a lack of trained staff explicitly associated with the program to assist with exercise and fitness promotion. Respondents shared that without staff that are trained in fitness, their programs are unable to “make exercise activities adaptable” or “demonstrate how to use the gym equipment.” Also, having a trained fitness staff member can help to overcome bureaucratic obstacles, as one respondent explained, “there used to be a point on campus when our students weren’t allowed to use the rec center because administrators thought it wouldn’t be safe.”

In addition to trained fitness staff within the program, restraints such as time and finances were other significant systematic barrier identified by participants. With regards to time, programs reported that they simply did not have enough hours in the day to include fitness within their current goals and activities. As one respondent said, “time is an issue and our biggest barrier. We cannot fit fitness and health and wellness into the normal structure of our daily activities.” Respondents also reported how financial restraints impact their ability to offer fitness options to students. As one staff member noted:

It costs money to sign up for classes that they are interested in outside of our curriculum. If they are interested in archery, they are required to have the necessary equipment and generally they cannot afford that. PE credits are $1000 per class and are only 1 credit. So, honestly, we encourage them not to take PE courses just because of the cost.

**Theme 3: Supports.**

Supports to having an exercise or fitness component also emerged as a theme from the data. Within this general theme, peer involvement and resources materialized as specific subthemes.

**Peer involvement.** Utilizing volunteers and peer mentors within their IPSE program was a common theme across all programs, with some having “mentors assigned to each student through an undergraduate course” and one program having up to 500 undergraduate student volunteers at their disposal. General roles of volunteers and peer mentors varied greatly across programs, with some programs having them focus on campus integration while others focused on social skills. Related to exercise and fitness promotion, one program reported using their peer mentors to facilitate structured activities: “our mentors informally set up times to exercise as a group several times per week.” One IPSE staff member shared that “some
students would rather go with a mentor to a class until they are uncomfortable going on their own.” Another added, “if they don’t have a social mentor go with them, it is much less likely that they will go and participate in fitness activities.” Others reported that they “always have students and volunteers present during our workouts to help motivate the [IPSE] students and provide the individualized attention that they require.” Using volunteers and peer mentors in this way is intentional, according to one staff member who noted “facilitating health and wellness is one of the big things that we try to get [peer mentors] to do.”

In addition to volunteers and peer mentors, other IPSE students sometimes facilitated their peers’ fitness as well. This influence could be direct (“we had a student who wanted to be a personal trainer be roommates with a student who wanted to lose weight. It was ideal because they helped each other out!”) or indirect (“just having each other as peers is a big influence to want to be better”).

**Program resources.** Classes, either general university undergraduate classes or classes unique to the IPSE program, were significant resources that facilitated fitness and exercise among programs. In some programs, students were required to take classes on a variety of topics: Health, Leisure Skills, Inclusive Fitness, Group Fitness, and Dance. Some programs created a way to simultaneously individualize classes while promoting fitness. As one respondent said, “we had one student take a country swing class. That was more of a social goal for her, but obviously swing dancing for a couple hours every week is great exercise.” In fact, the act of walking to and from classes was identified by one respondent as an exercise in itself: “it is a big campus, so the fact they are going from their dorms to their classes is good because they are getting solid walking in every day.”

In addition to classes, extracurricular activities also proved to be great resources to facilitate exercise. Examples of extracurricular activities among programs included rock climbing, Zumba, bowling, walking club, running club, intramural sports, swim club, group walks, and yoga. In addition, at one university, an IPSE tried out for and made the club baseball team on his own.

University gymnasiums and weight rooms were also mentioned as resources that help facilitate exercise. All respondents reported that their students currently have access to the college/university gym or student recreation center to exercise, just as any other student at their college or university would. Within the gym, common equipment used by IPSE students included treadmills, stair masters, ski-machines, and free weights. All respondents reported that their students have access to a trained fitness instructor at the university gym, but most programs reported that accessing these trainers would cost extra money separate from the IPSE program fees.

Certain resources within the university and community also were identified as a facilitating factor for fitness. For example, one program reported that they partner with their university’s Department of Public Health Sciences “for food nutrition and healthy living.” This respondent added that together: “We conduct various baseline assessments on IPSE incoming freshman each year, such as heart rate, BMI, and strength tests, then we monitor progress through the year.” Programs also cited collaboration with university and college athletic teams (e.g., men’s basketball team, football team, and golf team); campus recreational therapy groups; and university dieticians. One program used their connection with the student health center to facilitate a paid internship for an IPSE student who wanted to be a physical trainer, which “worked out perfectly.” Community groups also were great resources, as one program partnered with a group that specializes in inclusive activities and participated in off-campus whitewater rafting.

**Discussion**

There are a number of environmental factors that may hinder individuals with ID from engaging in physical activity and result in a sedentary lifestyle which puts them at increased risk for obesity. These factors are largely attributed to the settings and contexts where individuals with ID live, work, and engage in recreation, which often present varying degrees of opportunities to be physically active. Physical activity represents a broad range of activities that result in the expenditure of energy (Leung, Siebert, & Yun, 2017). There are a number of well-documented benefits from physical activity including the primary and secondary prevention of chronic diseases (e.g., cardiovascular disease, diabetes, cancer, hypertension, obesity, depression, and osteoporosis), with the maintenance of a healthy weight and reduction of obesity as one of the primary outcomes (Janssen & LeBlanc, 2010; Warburton, Nicol, & Bredin, 2006). One study investigated the physical activity levels of individuals with ID and their peers, presenting data that suggested employment of people with ID, especially in jobs that require manual labor, moderately increased their physical activity and significantly improve their health status (Finlayson et al., 2007).

Because people with ID require more support to health promotion and preventative services than the general population, their level of exercise is excep-
tionally dependent on supports in their respective settings. For instance, Pan, Liu, Chung, & Hsu (2015) demonstrated that adolescent students with ID are less involved in moderate to vigorous activity during school recess and called for more structured recess and recreation opportunities to promote engagement for this population in these settings. In contrast, settings can be structured to a point where they are restrictive and inhibit opportunities for people with ID to exercise. For example, Son and Jeon (2017) described how, due to time and financial restraints, simple abdominal exercises were introduced to adults with ID at a community residential care facility. They reported that these exercises had a positive impact on correcting posture and were relatively easy to implement, therefore making the case for similar facilities to allocate resources to allow for more targeted exercise programs. In addition to setting factors, caretakers themselves play a pivotal role in providing access to physical activity for people with ID. One study used interviews of adults with ID to investigate barriers and facilitators to a healthy lifestyle, finding that providers’ knowledge was both a significant barrier or facilitator of healthy behaviors (Caton et al., 2012). Service providers who did not place a high value on physical activity were less likely to facilitate or advocate for such opportunities.

These risks are exaggerated in people with ID, therefore the consequences of obesity are particularly problematic to this group who already experience social and health disparities (Biswas, Vahabzadeh, Hobbs, & Healy, 2010). Individuals with ID experience a number of barriers to achieving a healthy weight, such as low physical activity levels (Bartlo & Klein, 2011; Hilgenkamp, van Wijck, & Evenhuis, 2012; Temple & Walkley, 2003), social and economic factors (Liolet, Maire, Volatier, & Charles, 2007), unhealthy lifestyle choices (Mikulovic et al., 2014) and poor nutrition (Humphries, Traci, & Seekins, 2009). Thus, exploring and investigating various perceptions surrounding these barriers and potentially beneficial interventions and supports is critical. In this study, the role of exercise and fitness in IPSE programs was examined given that these settings are increasingly available as important programs found to increase positive adult outcomes for those with ID (Grigal et al., 2016). It was found that both IPSE program factors and individual student characteristics impact the role of exercise and fitness in IPSE.

According to the respondents, less than half of students in their IPSE programs are relatively active. Previous studies have linked obesity with a lack of physical activity in college students (Desai, Miller, Staples, & Bravender, 2008; Huang et al., 2003), but this study is the first to document this phenomenon in college students with ID. With regards to individual factors, respondents suggested that motivation as well as a lack of basic knowledge surrounding fitness and exercise were significant barriers in the implementation of fitness and exercise components in IPSE programs. Having students who are unmotivated to exercise can obviously create resistance to exercise programs, and a lack of knowledge restricts fitness options and often leaves individuals disengaged. Motivation as a barrier to exercise in ID populations is documented within the literature (Frey, Buchanan, Rosser Sandt, 2005), as is a lack of awareness surrounding healthy weight management in college students (Lowry et al., 2000). However, this is the first study to examine these barriers within an IPSE context.

The importance of peer involvement to facilitate individual fitness was also an important finding. Within the IPSE literature, benefits of peer involvement have been well documented (Blumberg & Daley, 2009; Jones & Goble, 2012). Peer involvement and social interaction has been found to increase exercise participation (Stanish & Temple, 2012), but their influence has not been studied within an IPSE context. The respondents perceived time and money as program factors that created barriers to implementing exercise and fitness activities with IPSE students. This mirrors previous research that shows finances and scheduling are often identified as barriers to exercise in other populations (Reichert, Barros, Domingues, & Hallal, 2007).

Respondents also perceived collaboration as a program-level facilitator. Benefits of collaboration between ISPEs and administrators, faculty, staff, and students in the college or university where they reside has been argued for before. The literature suggests that collaboration with IPSE programs can be mutually beneficial for the program as well as the collaborative partners. Folk, Yamamoto, and Stodden (2012) reported that IPSE programs can be a transformative process for not only the students, but for (postsecondary education) institutions and support agencies and concluded that “collaborative interagency teaming is a powerful method to inform and empower the implementation of change and stimulate new opportunities and approaches for transition services for students with ID” (p. 261). The respondents noted many benefits for university staff and students who helped incorporate exercise and fitness within an IPSE program.

Variability across IPSE program structure is not a novel finding, as this variability has been previously reported (Grigal et al., 2012). Further, considering that there is no mandated requirement for an explicit percentage of services needing to be student-specific
or mandated by the program, it appears that individual program philosophies may influence important decision-making at both the program and individual level. This was perhaps the most influential finding from the interviews, as the level of fitness and exercise implementation appeared to be largely due to program approach or philosophy. This finding parallels similar suggestions of the key role that stakeholders’ beliefs play in the management of obesity in individuals with ID (Jinks, Cotton, & Rylance, 2011). The extent of exercise implemented within each program generally was determined by program philosophy in delivering services: person-centered versus program-centered (see Figure 1). Programs that leaned towards a more person-centered philosophy tended to give their students more autonomy in deciding whether or not to exercise, how to exercise, when to exercise, etc. Conversely, programs that leaned towards a more program-centered philosophy were more regulated in general, including increased requirements and direction of their students’ exercise. Differences in program structure and philosophy may lead to different outcomes, and the field would benefit from additional research to understand which IPSE structures and activities are associated with positive results in students with ID, such as engagement, decreased body mass, and improved social emotional competencies (i.e., self-esteem and body image) (Flanagan 2013; Hawkins, Stegall, Weber, & Ryan, 2012; Rubbert, 2014).

Limitations and Future Directions

The findings of this study should be interpreted with caution as this study has several noteworthy limitations. First, being a qualitative study, findings cannot be extended to wider populations with the same degree of certainty that a larger quantitative study might provide (Atieno, 2009). Also, the data are self-report and thus information is provided from IPSE staff members’ personal experiences and perspective. Future research should examine perceptions of students with ID to better understand their perspective on the importance, facilitators, and barriers of physical activity of their program as well as their motivation toward and self-efficacy regarding exercise. A second limitation of this study is that programs that were residential four-year IPSE programs was the focus, so the findings may not generalize to other types of IPSE programs; specifically, respondents represented a relatively small number of residential IPSE programs (nine out of 54), and no respondents were recruited from non-residential programs. Future research should target the multiple configurations of IPSE programs to develop a comprehensive understanding of available fitness activities and supports. Likewise, the impact of optional versus mandated program components on IPSE students’ fitness and exercise is an important question for future work.

With new IPSE programs being established at a rapid rate, researchers have an opportunity to develop a comprehensive and nuanced picture of fitness and exercise programming for students with ID. For example, future studies should look into the role that experiences in secondary education play in respect to barriers to fitness and health in the ID population, as was mentioned by several respondents. Specifically, examining whether transition plans and IEPs include exercise and fitness goals, and how K-12 schools facilitate fitness and exercise for students with ID would be important information for developing new interventions and supports. Additional studies evaluating the specific techniques and methods that IPSE programs use to promote fitness are needed to establish these approaches: acceptability, effectiveness, and generalizability.

Summary and Implications

This study is important given the high degree of obesity and associated health problems in adults with ID. Interview respondents indicated a number of program and individual factors that may support or inhibit students’ physical activity within four-year residential IPSE programs. Interestingly, despite the variability in how fitness and exercise services were delivered, nearly all programs valued health and wellness as important to their program (at or above a 6 on a scale from 1-10). It was also found that fitness-related content and activities may reflect programs’ underlying foundational philosophies with student-focused versus program-mandated programming as the primary distinguishing feature (see Figure 1). However, the extent to which one philosophy or approach promotes better fitness and exercise outcomes has yet to be determined and should be investigated further.

One of the primary factors reported to influence IPSE students’ level of physical activity was the value and practice of allowing individuals with ID to make their own life choices. Within a health and wellness context, the data suggest some programs believe that young adults with ID that attend their program should never be explicitly told where or how often to exercise (i.e., these choices are left to each individual student), and other programs believe it to be their responsibility to develop structured exercise or fitness components and require that students attend them. Given the tremendous problem with obesity and its association with a number of diseases, poor health outcomes, and the vulnerability of this population to
these conditions, consideration of more structured fitness components in IPSE programs must be balanced with educators’ desire to promote self-determination and freedom of choice for young adults with ID.

References


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Douglas (DJ) Roberts received his B.A. degree in psychology from Newberry College and M.Ed and Ed.S from Georgia State University. He is currently a school psychologist for the Transition Bridge program in Douglas County School District in Colorado, where he provides mental health and transition services to individuals age 18-21 with intellectual and developmental disabilities. His research interests include transition of secondary-age students with disabilities, health and wellness for individuals with intellectual disability and inclusive post-secondary education (IPSE). He can be reached by email at: drobertsjr@DCSDK12.org.

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Anthony Plotner received his Ph.D. in Special Education from the University of Illinois at Urbana-Champaign. He is currently an Associate Professor in the Department of Educational Studies at the University of South Carolina. He also is the Director of CarolinaLIFE (an inclusive postsecondary education program for students with intellectual disability). His research interests include the community inclusion of individuals with diverse needs: specifically, transition to college, supported employment, and the collaboration across systems to promote positive adult life outcomes. He can be reached by email at: plotner@mailbox.sc.edu.
### Table 1

**Demographic Information of Participants and their Respective Programs**

<table>
<thead>
<tr>
<th>Participant Number (Role)</th>
<th>Highest Degree Attained</th>
<th>Disability-Related Work (yrs.)</th>
<th>Postsecondary Education Work (yrs.)</th>
<th>Program Existence (yrs.)</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td></td>
<td>17.11</td>
<td>6.94</td>
<td>6.66</td>
<td>57</td>
</tr>
<tr>
<td>1 (Program Coordinator)</td>
<td>Ed.S.</td>
<td>18</td>
<td>1.5</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td>2 (Program Director)</td>
<td>Ph.D.</td>
<td>10</td>
<td>3</td>
<td>8</td>
<td>23</td>
</tr>
<tr>
<td>3 (Program Director)</td>
<td>Ph.D.</td>
<td>39</td>
<td>16</td>
<td>8</td>
<td>258</td>
</tr>
<tr>
<td>4 (Peer Support Coordinator)</td>
<td>B.S.</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>5 (Program Administrator-Admissions &amp; Business Dev.)</td>
<td>M.A.</td>
<td>20</td>
<td>6</td>
<td>4</td>
<td>70</td>
</tr>
<tr>
<td>6 (Co-Principal Investigator/Faculty Advisor)</td>
<td>M.A.</td>
<td>25</td>
<td>5</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>7 (Program Director)</td>
<td>M.A.</td>
<td>20</td>
<td>15</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>8 (Program Coordinator)</td>
<td>M.A.</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>9 (Assistant Program Coordinator)</td>
<td>M.A.</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>53</td>
</tr>
</tbody>
</table>

### Table 2

**Sample Interview Questions**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Sample Questions</th>
</tr>
</thead>
</table>
| Barriers                     | • What are some barriers to having an exercise or fitness component in your program?  
                               | • Can you provide an example of a student who has struggled to have a healthy lifestyle due to an existing health condition? |
| Facilitators                 | • How are peers with and without disabilities involved in existing exercise or fitness programs?  
                               | • How are parents and families involved in existing exercise or fitness programs?  
                               | • In your opinion, how do you feel that Postsecondary Education programs could improve the facilitation of student health and wellness? |
| Program Structure            | • Does your university or your specific program promote exercise or fitness activities?  
                               | • How have you modified your curriculum to support healthy lifestyles for the students? |
Program-Centered
Required fitness and health
components (e.g., At least 5
hours of weekly physical activity
mandated and monitored).

Student-Centered
Fitness and health activities
optional (e.g., Student decides
when and how to participate in
exercise).

Figure 1. How IPSE program philosophy in delivering services can influence the extent of exercise implemented.
Promoting Employee Handbook Comprehension for Postsecondary Students with Intellectual Disability and Autism Spectrum Disorders

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Joshua N. Baker¹
K. Ryan Wennerlind¹
Mona Nasir-Tuck¹

Abstract

The ability to read is an essential part of an independent life in our society. Individuals with Intellectual Disability (ID) and Autism Spectrum Disorders (ASD) often struggle with learning to read; therefore, discovering strategies to build literacy skills is essential to their success in employment and independence. A multiple probe across participants design was used to investigate the effects of an adapted employee handbook paired with systematic prompting on text comprehension with postsecondary students with mild to moderate ID and ASD. This investigation involved three young adults with ID and ASD attending a postsecondary education program. The results demonstrated a significant increase in the ability of all three students to answer comprehension questions based on an adapted employee handbook compared to baseline, which did not include the systematic prompting or graphic organizer. After intervention, all three participants were able to maintain improved comprehension levels in the maintenance phase. The findings suggest this to be an effective practice for improving literacy skills and access to important functional texts such as employee handbooks for young adults with ID. The results of this study could be generalized to a number of disability service providers. Practical application and future research are also discussed.

Keywords: Postsecondary students, adapted text, autism spectrums disorders, intellectual disabilities, transition

Competitive employment rates for individuals with intellectual disabilities (ID) and autism spectrum disorders (ASD) are much lower than for those without disabilities (Human Services Research Institute, 2012). The Arc (2011) supported Family and Individual Needs for Disability Supports (FINDS) survey reported that 85% of people with ID were not working. Those with ID and ASD who are employed make less money, are underemployed, have lower job skills, higher poverty rates, and fewer employment benefits (Stodden & Dowrick, 2000; U.S. Senate Committee for Health, Education, Labor and Pensions, 2011; Wagner, Cameto, & Newman, 2003). Access to and continued success in employment is extremely difficult for this population. Individuals with ID and ASD historically are not as successful as their non-disabled peers when it comes to transitioning to a quality adult life, especially because of their low literacy rates (Bradford, Shippen, Alberto, Houchins, & Flores, 2006; Houston & Torgesen, 2004). A multitude of problems stem from these low literacy skills, including individuals with low-incidence disabilities such as developmental disabilities, ID, or ASD having the lowest rates of employment (U.S. Department of Education, 2009) and the resulting economic hardship and overall concern with health and wellness.

There are many skills and indicators necessary for employment success. High amongst those skills is literacy (Conceição, 2016). Literacy skills are essential to acquiring knowledge to build the critical thinking skills needed for employment (Levy & Murnane, 2006); however, achieving the complex skill of literacy is very difficult for those with ID and ASD. Because high school and post-high school students with ID and ASD have significantly limited literacy skills, including reading levels at or below second grade,
access to important informational texts that may affect their quality of life, including employment, is extremely limited (Katims, 2000). One such example of this is accessing and understanding employee handbooks or manuals.

Although many may not spend a lot of time reading through them, employee handbooks are the collection of the essential policies, procedures, focus, and goals of a company. The U.S. Small Business Administration (n.d.) recommended that companies provide handbooks to ensure that all employees understand the expectations of employers. This is also where employers list the required information from the U.S. Department of Labor such as safety statements and guidelines, break and leave policies, and much more. Employee handbooks are an important piece of text for all employees to understand to facilitate workplace success. Oftentimes, these texts are written at very high reading levels and can be very difficult to understand for many readers.

To build more accessible employee handbooks, it is important to embed what is known about literacy and students with ID and ASD. Literacy instruction for this population has only recently been focused on more comprehensive instruction (Allor, Mathes, Roberts, Cheatham, & Otaiba, 2014; Browder, Wakenman, Spooner, Ahlgrim-Delzell, & Algozzine, 2006; Courtade, Lingo, & Whitney, 2013; Mims, Hudson, & Browder, 2012). Prior to that, the focus of literacy instruction was primarily on sight word recognition (Browder, Ahlgrim-Delzell, Courtade-Little, & Snell, 2006). If comprehensive literacy instruction practices have only recently been available, young adults of employable age most likely only had sight-word instruction and therefore continue to have limited literacy skills. Despite the challenges that go along with teaching students with ID and ASD to read and comprehend a text, the ability to read is an essential part of an independent life in our society; therefore, discovering strategies and methods that are effective in building those literacy skills for individuals with ID and ASD is essential to success in employment and independence.

A review of the research on the effective literacy instruction of individuals with ID and ASD in secondary or postsecondary programs revealed a focus on adapted texts combined with the use of pictures, shared stories, and systematic prompting incorporated within tablet technology such as an iPad® (Browder, Wakeman, et al., 2006; Evmenova, Behmann, Mastropieri, Baker, & Graff, 2011; Lemons, Allor, Al Otaiba, & LeJeune, 2016). In addition, shared stories or read alouds, are often used as a component of a more comprehensive program that incorporated systematic prompting, were shown to be an effective method to build comprehension and engagement of individuals with ID and ASD (Allor et al., 2014; Browder, Mims, Spooner, Ahlgrim-Delzell, & Lee, 2008; Shurr & Taber-Doughty, 2012; Solis, El Zein, Vaughn, McCulley, & Falcomata, 2015). Systematic instruction, including an explicit prompting system and graphic organizers to aid students in text analysis and comprehension, has also been an effective method for building literacy skills for individuals with ID and ASD (Browder, Hudson, & Wood, 2013; Mims et al., 2012; Mims, Lee, Browder, Zakas, & Flynn, 2012; Ozmen, 2011). The use of texts adapted from the general education curriculum has successfully provided access to grade-level text for students with ID and ASD in elementary and middle school (Browder et al., 2008; Coyne, Pisha, Dalton, Zeph, & Smith, 2012; Knight, Wood, Spooner, Browder, & O’Brien, 2015; Spooner, Kemp-Inman, Ahlgrim-Delzell, Wood, & Ley Davis, 2015; Spooner, Rivera, Browder, Baker, & Salas, 2009). Browder et al. (2008) and Coyne et al. (2012) also paired this concept of adapted texts with the principles of Universal Design for Learning (UDL) for their studies. Technology has provided teachers with an accessible tool to adapt text and pair it with pictures, videos, read aloud, and comprehension checkpoints to aid in instruction. The use of e-readers in research has shown that students increase their engagement and participation in the text when using this technology (Coyne et al., 2012; Douglas, Ayres, Langone, Bell, & Meade, 2009). Using portable electronic devices to provide instruction has been successful for individuals with a variety of disabilities because of its simplicity and built-in accessibility tools (Kim, Blair, & Lim, 2014; Knight et al., 2015).

These elements have previously demonstrated success in building literacy skills for elementary and middle-school aged individuals with ID and ASD in the areas of school-based texts. Very little research has been done on building literacy skills for young adults with ID and ASD. This study was designed to extend the research for the use of combining read aloud, text adaptation, technology, graphic organizers, and systematic instruction to build the text comprehension for postsecondary-aged students with ID and ASD. For the purposes of this study and to assist postsecondary students with ID and ASD in their transition to the workplace, the researchers adapted an employee handbook and incorporated a systematic instruction literacy package to not only make the text more accessible to low-level readers, but to also teach text comprehension skills to individuals using functional, real-world texts.
Mims et al. (2012) adapted grade-level biographies for middle school students with moderate to significant ID. This pilot study expands on the findings of Mims et al. by focusing on transition-aged students (aged 18 to 22) participating in a postsecondary program for students with mild to moderate ID and ASD, and using adapted employee manuals as texts. It was hypothesized that developing an accessible employee manual and providing skill instruction in building comprehension of text will expose individuals with low literacy skills to a useful system to build understanding of employer procedures and expectations, which may promote greater on-the-job success. More specifically, the purpose of this pilot study was to evaluate the effects of a read aloud of an adapted employee handbook combined with a systematic-instruction-based literacy treatment package to the text comprehension of young adults with ID and ASD.

Method

A multiple-probe across participants design was used to examine the effects of a systematic instruction-based literacy package on the comprehension of an adapted employee handbook read aloud. The multiple-probe was used because the collection of continuous baseline data did not seem necessary and reactive (Horner & Baer, 1978). For example, although the participants could answer some of the baseline questions, they could have become frustrated being asked the same questions each day without any instruction. The probe allowed the researcher to ensure the data were stable without causing frustration. The following section outlines the process of participant selection and inclusion, the setting, and the procedures involved in the study.

Participants

Three participants were selected from a convenience sample gathered from an inclusive postsecondary education program for individuals with moderate intellectual and/or developmental disabilities, ages 18 to 22, from a university in the southwestern United States. The inclusion criteria for participants required that: (a) adult students (e.g., they did not have a guardian) signed consent for participation; (b) students were part of a postsecondary program for individuals with intellectual or developmental disability to attend university; (c) students were able to communicate verbally; (d) students were able to select one item from a series by pointing or speaking; and (e) students had acceptable attendance (i.e., no more than five absences in the previous quarter). Since each student was his or her own guardian the reliability of each student’s voluntary consent to participate in a research study was assessed every data collection session. For example, Charles was asked each day if he would like to participate and was ensured that his participation was voluntary.

Brenda. Brenda was a 19-year-old, White female with autism. She was in her second year at the university’s inclusive postsecondary program for individuals with ID and ASD. Brenda was able to express herself verbally, but was very literal in her conversation with others. Brenda had mild hearing loss and wore hearing aids for support. She had worked with children in the past and was interested in working with children in the future. At the time of the study, Brenda was an intern at the university preschool where she completed a number of workplace tasks. At preintervention assessment, she was able to read the employee handbook independently, but she was not able to answer more than 5 of the 10 comprehension questions correctly.

Charles. Charles was a 20-year-old, White male with Down Syndrome in his second year at the university’s postsecondary program. Charles communicated verbally and was social with friends and classmates but at times, he was difficult to understand. Charles had mild hearing loss but did not wear hearing aids for support; however, this did not negatively affect his ability to interact with others. Charles was able to express his wants and desires effectively and he had expressed an interest in working at the university preschool. At the time of the study he was interning with the university athletic department. He was not able to read the employee handbook independently at preintervention assessment.

Adam. Adam was a 19-year-old, White male with autism and was in his first year of the university’s postsecondary program. He was verbal but often used a high, child-like tone in his communication. Adam was less social than other students in the postsecondary education program but this did not affect his ability to communicate his wants and desires with others. Adam had listed the preschool as a possible internship placement interest. Adam was able to read the employee handbook at preintervention assessment, but he only answered 4 of the 10 comprehension questions correctly.

Setting

The intervention took place in a one-on-one setting at a small table in the first author’s university office. This was the same location other university students would meet with the first author for supports for courses they were taking. The office was located
across from the main office of the department and a large classroom so there was a lot of student traffic crossing through the hallway. The instruction took place during convenient break periods for each participant. Each student would normally be relaxing in another office or at the library during these periods. Implementation of the study was completed by a full-time doctoral student and instructor at the university who was also a licensed special education teacher with an endorsement in ID and seven years of experience working with students with intellectual and developmental disabilities.

Participants sat next to the interventionist with the iPad on a stand placed on a desk in between them. The graphic organizer was placed in front of the participant during the session. The office door remained open during interventions.

Materials

Materials included in this study were the adapted employee handbook from the university preschool, an iPad Air 2®, a picture-based graphic organizer, and data collection sheets. An Apple desktop computer installed with iBook Author® was used to develop the adapted handbook. The handbook was then uploaded as an iBook® into the iPad® for the student participants to view.

Employee handbook. One of the participants was working at the university preschool and the other two students were interested in interning at the preschool site so the employee handbook from the preschool was selected for this pilot study. A general section of this employee handbook was adapted to use in this study. The handbook was extensive, so the section that pertained most to students’ daily duties and job requirements was chosen for this intervention. To ensure content validity, the adapted handbook was developed by the first author from the original handbook and then reviewed by two experts: a university professor whose specialty was working with individuals with ID as well as a representative of the job site. They reviewed the adapted handbook text for accuracy and to determine whether the adaptation represented the heart of the content of the original work. Adjustments were made to the handbook based on their suggestions.

Comprehension questions. The comprehension questions were designed to replicate a portion of the Mims et al. (2012) study and included nine “Wh” questions, such as who, what, where, when, and why; as well as one how question. As sequencing (e.g., first, next, and last) was not really embedded within the information provided in the text, this element from Mims et al.’s study design was not included. The questions were placed throughout the text to reflect what was happening in that portion of the piece (see Table 1 for a list of the questions). Following a page of adapted text, a question with a choice of four responses (one correct answer and three distractors) was given.

Text. The adapted text was built using iBooks Author® and included pictures that aligned with the text content. There were a total of 10 text pages, each followed by a question page. The answers included the appropriate response as well as three distractor answers that were related to the question (e.g., if the question was about a place or setting, all of the answers were places or settings). Most of the answer pictures were within the text of that page so the participant did not simply match the picture with the only choice on the page. If that was not feasible, pictures that were not used on the text page were used for the comprehension question page. The answers were listed in text and then aligned with related pictures. The placement of the correct answer varied from page to page. Three versions of the handbook were created that varied the page order as well as the answer order to avoid response error associated with the participant choosing the same answer location. The version used for each intervention session was randomly selected at the beginning of each session.

Graphic organizer. One graphic organizer was used to assist participants in determining the appropriate answer (adapted from Mims et al., 2012). This organizer displayed the steps to answering the “Wh” questions (see Figure 1) and served as a tool the participants may use to assist in answering the questions. A color hardcopy of the organizer was placed in front of the participant and reviewed prior to each intervention and maintenance phase.

Research Design

In this pilot study, a multiple probe across participants design was used to evaluate the effectiveness of systematic instruction on the comprehension of an adapted employee handbook. Baseline data were collected on the participants’ preintervention response to comprehension questions based on the adapted text. Throughout baseline, the interventionist did not use the systematic prompting or the graphic organizer but the pictures and the read aloud components were provided for the participants. After a stable baseline was established for the first randomly selected participant, the interventionist began instruction using a graphic organizer (see Figure 1) and embedded systematic prompting. To avoid unintentional learning through repeated testing and exposure to materials, the remaining participants were periodically probed.
on their baseline skills while Participant 1 was in intervention. The phases of the study consisted of baseline, intervention, generalization, and maintenance. The participants were introduced to the intervention one at a time following a time lapse procedure. Once a participant demonstrated mastery of a text, the next intervention phase was introduced. The rule set for this study was three sessions of 100% mastery or a total of six intervention sessions before the next participant was introduced to intervention.

**Measurement**

The dependent variable of this study was the number of unprompted correct responses to a series of text-based comprehension questions created by the research team. Event recording was used to determine the number of correct comprehension questions answered for the adapted text (see Table 1 for comprehension questions). One section of an employee handbook was adapted for the intervention. To ensure that the questions measured participant comprehension of the text, a university expert and a leading preschool staff member reviewed the questions and adapted text.

When participants selected answers to the questions, they touched the response they wanted on the iPad. The answer button would then light up, indicating their selection. The answer was recorded on another paper and then verified by the researcher by going through the selections on the iPad and cross-checking the responses recorded by the researcher.

To ensure procedural fidelity during data collection, a second member of the research team observed and recorded responses during 25% of the baseline and intervention sessions. The responses were then compared. The number of agreements were divided by the number of agreements plus disagreements and then multiplied by 100%.

**Procedures**

Participants were brought into a one-on-one setting with the interventionist for the procedure. These sessions took place based on when the participant was available (between classes) and on campus. Each session took approximately 10 minutes and sessions took place three to five days per week (depending on participant and researcher availability).

**Baseline.** The researcher sat next to the student participant at a small table with the iPad® propped up between them. The handbook version that was randomly selected for that session was displayed on the iPad®. The researcher read the text aloud and then let the student swipe to the next page. The question was read along with the answer choices. The interventionist then waited for the student to select an answer choice by touching the answer on the tablet display. If the student verbalized the answer, the interventionist prompted the student to select that answer on the screen. After each response, the interventionist recorded a “+” for a correct answer and a “−” for an incorrect answer. No indication of whether the answer was correct was given to the student. The interventionist gave the student verbal praise for participation and then moved to the next page of text. After the adapted handbook and all questions were read, the interventionist thanked the student for participating and sent the student on to whatever was next on his or her schedule. The interventionist then compared the responses noted on the data collection sheet to the responses noted in the iBook® question pages. Once they were confirmed correct on the data sheet, the student responses were cleared.

**Intervention.** The same adapted text was used for each participant. During the reading, the interventionist read the text to an individual participant from an iBook® using an iPad®. Prior to each session, the graphic organizer was reviewed with the participant and then placed in front of the student to refer to during the intervention. The participants were then asked to respond to the comprehension questions on each page by touching the appropriate picture or answer options on the screen, just as in baseline. Following the design by Mims et al. (2012), the interventionist asked a comprehension question at a predetermined point and waited 4s for a response. If correct, the response was recorded as an unprompted response and the participant was given verbal praise. If not correct or no response was given, a prompt was delivered by reminding the participant what type of “Wh” question was answered and the rule it followed using the graphic organizer (see Figure 1). Then the paragraph that had the answer was read again and the question and response options were repeated. If the participant did not respond or gave an incorrect response, a second prompt was given where the sentence containing the answer (targeted reread prompt) was read again, the correct response was then modeled (e.g., pointed to the correct answer), the question and response options were then reread and the interventionist waited another 4s for a response. If needed, a third prompt was given. This consisted of a controlling prompt where the interventionist pointed to the correct answer and said, “The answer is ____. Your turn. You point to ____.” The participant was then given descriptive verbal praise and the correct answer restated (“That’s right, the correct answer is ______”). If the participant still did not point to the correct answer, the interventionist gave hand-over-hand assistance as
well as the same verbal praise mentioned in the third prompt. Once the participant successfully answered all 10 questions without prompting for three sessions, the participant was moved to the maintenance phase. As the participants completed the intervention, they were probed weekly after intervention to determine maintenance levels. The first participant reached the maintenance phase within 4 intervention sessions and therefore was able to be probed multiple times within the maintenance phase. The subsequent participants took longer to reach the maintenance phase and the semester ended after only one maintenance probe was taken.

Data Analysis

The number of correct, unprompted responses to the measurement questions were graphed for both the baseline and the intervention (see Figure 2). Then the data were analyzed visually for trends, variability, and to determine the relationship between the dependent and independent variables. Functional relationships were examined as well as practicality of implementation in the classroom or postsecondary setting.

Reliability

The list of comprehension questions was evaluated by an assistant professor and doctoral student who had worked with the participants over the course of the past semester as well as an employee of the business from which the handbook was obtained to verify they represented comprehension of the text as well as whether they were challenging enough for the participants. The questions were then pilot tested with a sample of individuals without disabilities to ensure the questions were phrased appropriately and made sense to the reader/listener. During baseline and intervention, the iPad® recorded the responses for each student and these responses were double-checked against the responses recorded by the interventionist to ensure reliability of data collection. A second observer took procedural fidelity data during 28% of the baseline, intervention, and maintenance sessions to ensure reliability of the intervention. The number of steps present was divided by the total number of planned steps and then multiplied by 100% to calculate a procedural fidelity of 95%.

Results

During each session, participants were asked a total of 10 comprehension questions with regard to the text. Brenda correctly answered 93 out of 110 total questions (85%), Charles correctly answered 102 out of 190 total questions (53%), and Adam correctly answered 90 out of 130 total questions (69%). Individual participant data are displayed in Figure 1. Table 2 compares the mean number of correct unprompted participant responses across study phases as well as the ranges for baseline, intervention, and maintenance. Table 3 displays the frequency and percentage of correct responses to the comprehension questions categorized by type of question.

Brenda. The strongest reader of the three participants, Brenda held a steady baseline at midrange (i.e., either five or six correct responses) for three data points. The team determined that she was ready for intervention at that point. Once in intervention, she jumped to 8 out of 10 correct in the first session. During the next three consecutive sessions she scored 10 out of 10. At that point, since she had achieved mastery, she was moved to a maintenance phase, and the next participant was introduced to intervention. Brenda continued to score 10 out of 10 over four more data points over the course of four weeks.

Charles. The second participant, Charles, struggled the most of the three students. He began to trend upward during his first 4 baseline sessions so baseline was continued until he stabilized. After 7 data points in baseline, he was consistently scoring between 1 and 2 answers correct. Once in intervention, he stayed at 2 for the first session and then jumped up to 6 correct out of 10. He held steady between 6 and 7 for five sessions, so intervention was continued. By session 10, this participant was scoring 10 out of 10, which he maintained for three intervention sessions and one maintenance session.

Adam. Adam held a steady baseline early on so he was moved to baseline probes while Charles was in intervention. He was probed immediately before intervention began and answered 5 out of 10 correct. Once intervention began, he held a steady trend upward until he was at 100% at the fourth session of intervention. He maintained 100% mastery for three sessions and one maintenance session.

Maintenance

There was limited time to complete maintenance probes for all three participants due to the semester ending. Because Brenda completed baseline and intervention quickly, she was available for four maintenance probes over the course of four weeks. She maintained 100% accuracy during this phase. Charles had an extended baseline due to variability and an extended intervention phase due to the length of time it took him to master the questions. The length of these two phases and the ending of the semester led to only one intervention probe, which took place one week after intervention ended. He remained at 90% in
maintenance. Adam too only had time for one maintenance probe at two weeks after intervention ended. He remained at 100%.

Social Validity

A social validity survey was given to participants that included ratings scales on whether they liked the intervention, found it helpful, and would like to use something similar in the future. Comments were combined thematically. The overarching theme that emerged was that the results of this study were important in informing and adding to the evidence base for the need for adapted and universally accessible real-life texts such as employee handbooks. Field observations of and feedback from the research team described the adaptation process as very time consuming, particularly in obtaining and adding the pictures throughout, but was practical and easy to use in the workplace setting. The research team strongly agreed that the prompting system was effective and appropriate for the intervention. The students all agreed that the intervention was practical and easily used in a workplace or home setting. They agreed that the prompting system was appropriate for the intervention. Of the participants, two strongly agreed and one agreed that the questions asked were appropriate and related to the job. All three participants stated that they liked the intervention and the use of the iPad® and iBook® as a delivery method. A total of 100% agreed that they found the adapted text helpful and that they would like to use something similar in the future.

Discussion

The purpose of this pilot study was to evaluate the effects of a read aloud of an adapted employee handbook combined with a systematic-instruction-based literacy treatment package to the text comprehension of young adults with ID and ASD. Previous research using shared stories and read alouds for grade-level text have been very successful (Courtade et al., 2013; Mims, Browder, Baker, Lee, & Spooner, 2009; Mims et al., 2012; Spooner et al., 2015), but they have not included young adults with ID and ASD or workplace texts such as employee handbooks. An essential component of workplace success is having literacy skills (Conceição, 2016). This research is necessary to explore literacy instruction and accessibility options for young adults with ID and ASD who are currently in the workplace or preparing for the workplace setting. Furthermore, this research could provide assistance to all disability service providers that are working on competitive integrated employment opportunities with clients.

Similar to past research (e.g., Mims et al., 2012), the research team found that it was very easy to increase comprehension when a few elements of the principals of Universal Design for Learning (Rose & Meyer, 2002) and evidence-based literacy instruction such as systematic instruction (Spooner, Browder, & Mims, 2011) were applied to the employee handbook. All of the participants in this study made progress during this intervention as compared to baseline. Only one of the participants demonstrated significant variability within the baseline phase. Brenda held steady at a midrange at baseline and then made immediate improvements after the first intervention session. Adam had some slight variability that could have begun an upward trend in baseline, but overall he was relatively stable over baseline. In the interest of time, the research team determined that he was ready for intervention despite the variability. It took several baseline sessions to achieve stability for Charles, and he needed several more intervention sessions than the other participants to reach mastery of the content in the intervention stage. Most important, though, is they all eventually achieved mastery of the comprehension questions. All participants made a significant increase in level from baseline to intervention and then were able to sustain those levels in the maintenance phase. These outcomes are important additions to the current literature on improving the reading comprehension skills of students with intellectual and developmental disabilities, especially at the postsecondary level (Allor et al., 2014; Conners, 1992; Courtade et al., 2013; Hudson & Test, 2011; Mims et al., 2012). Earlier studies (Courtade et al., 2013; Mims et al., 2009, 2012) used shared stories with fiction and biographies to demonstrate reading or literacy gains for students with intellectual and/or developmental disabilities. This current study expands on these by using employee handbooks to improve individuals’ success on the job.

This study also built on the work of Mims et al.’s (2012) use of comprehension questions that followed a set of rules to build text comprehension for individuals with developmental disabilities. Only the “Wh” questions were given a rule in the graphic organizer, and a “How” question was added for a comparison. As can be seen by the results in Table 3, there was no difference between the percentage correct for a “Wh” question than the “How” question, implying that the success of the students in answering the comprehension questions may have been due more to the repeated readings of the text than the graphic organizer. Future research is needed to determine if a graphic organizer and set of rules of this type really helps with text comprehension for students with developmental disabilities.
Limitations

There are multiple limitations to this pilot study. To begin with, there was a small sample of only three individuals from a conveniently selected setting. All three were from the same postsecondary program for students with intellectual and developmental disabilities with very little diversity in race or socioeconomic status. They were all between the ages of 18 and 19 years old and were all capable of navigating a university campus independently. The adapted text and comprehension questions were original measurements so the reliability and validity could be questioned. Only a few pages of one specific handbook were included in this study so more research is needed on an entire handbook and a variety of handbooks from different types of workplaces. There was also no assessment of whether knowledge of the text led to improved performance in the workplace. For example, although Brenda showed improved performance over the course of the intervention, she completed various tasks during her internship directly related to the employee handbook, and there is no way to determine whether it was the result of the intervention or prior knowledge. Finally, it was noted that Charles struggled in his reading comprehension. It is a possibility that Charles’ gains could have been through repetition of the intervention. Again the application piece needs to be extended in future research.

Implications for Future Research and Practice

Future research in this area should focus on using a variety of postsecondary schools and/or programs as well as demographics. In the future, similar studies should look across multiple disability services providers (e.g., job coach, vocational rehab case manager). In addition, this intervention should be tried with younger students (e.g., middle school and high school) to introduce and explore important job training skills earlier. This type of intervention should be tried with more students in the mild to moderate disabilities category so further evidence of the effectiveness of adapted texts and access to read aloud may improve understanding for employers of having this type of handbook available to all employees. Further exploration is needed as well on the frequency and duration of the intervention as the maintenance phase was cut short due to time constraints. Future research should include related workplace task performance measure to assess carryover of text comprehension to actual workplace skills.

This pilot study gives more insight into methods for teaching students with mild to moderate ID and ASD how to better access the world of reading. The combination of read aloud, adapted text, technology use, and systematic prompting should be used within the classroom, with other service providers, and beyond to help individuals with ID and ASD at all ages improve their text comprehension. Specifically, disability service providers, when working with young adults with ID and ASD in the postsecondary setting, should examine the use of universally designed texts as an accommodation in college courses. This along with the provision of tutoring services using systematic instruction to build comprehension skills and strategies, could potentially help these students progress more effectively through their courses.

Within postsecondary education programs for individuals with ID and ASD, program coordinators should use the information from this study to work with potential employers to adapt employee handbooks or written policies and procedures using principles of Universal Design. When paired with systematic instruction, the data from this study support increased comprehension of these very important texts. Educational coaches can work with students to build their skills in interacting with this type of text to increase their independent access and use of the text itself. As students progress in their independent use of this type of adapted text, they could potentially transfer that to future employment settings, thus improving their chances for continued employment success. The results from this study add to the evidence base that individuals with ID and ASD can comprehend workplace texts if given appropriate access to those materials.

References


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Table 1

Comprehension Questions

Employee handbook questions
Question 1:  What do you need to do if you keep missing work?
Question 2:  Who should you report to if you get hurt at work?
Question 3:  What is one of the things you need to work here at the preschool?
Question 4:  Where should you take broken or damaged toys?
Question 5:  How should you handle big problems with students?
Question 6:  When should you talk about students to other parents or people outside of the school?
Question 7:  When should you bleach the cots?
Question 8:  When should you watch the children?
Question 9:  What is NOT a monthly duty?
Question 10:  When should you check your health card and Sheriff’s card?

Table 2

Mean Number of Correct Unprompted Participant Responses Across Study Phases

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brenda</td>
<td>5.33</td>
<td>5-6</td>
<td>9.5</td>
<td>8-10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Charles</td>
<td>2.29</td>
<td>0-5</td>
<td>7.18</td>
<td>2-10</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Adam</td>
<td>4.67</td>
<td>3-6</td>
<td>8.67</td>
<td>6-10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>
Table 3

*Number of Correct Responses to Questions by Type*

<table>
<thead>
<tr>
<th>Question</th>
<th>Total Number of Chances (n)</th>
<th>Brenda</th>
<th>Charles</th>
<th>Adam</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who</td>
<td>43</td>
<td>11</td>
<td>12</td>
<td>8</td>
<td>31</td>
<td>0.72</td>
</tr>
<tr>
<td>What</td>
<td>129</td>
<td>26</td>
<td>28</td>
<td>30</td>
<td>84</td>
<td>0.65</td>
</tr>
<tr>
<td>Where</td>
<td>43</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>28</td>
<td>0.65</td>
</tr>
<tr>
<td>When</td>
<td>172</td>
<td>36</td>
<td>38</td>
<td>33</td>
<td>107</td>
<td>0.62</td>
</tr>
<tr>
<td>How</td>
<td>43</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>28</td>
<td>0.65</td>
</tr>
</tbody>
</table>

*Note.* Includes baseline, intervention, and maintenance phases.

---

**When you hear**

- **What?** Listen for a thing.
- **Why?** Listen for a “because.”
- **Who?** Listen for a name.
- **When?** Listen for a time or date.
- **Where?** Listen for a place.

*Figure 1.* Graphic organizer for answering comprehension questions.
Figure 2. Number of unprompted correct responses to comprehension questions. Break in data for Charles was due to an absence.
“Letting Go:” Parent Perspectives on the Outcomes of an Inclusive Postsecondary Education Experience for Students with Developmental Disabilities

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Abstract

This qualitative study examined the desired and perceived outcomes of inclusive postsecondary education (IPSE) for individuals with intellectual and developmental disabilities (IDD) from the perspective of their parents. Currently, little is known about how individuals with IDD benefit from IPSE. Twenty-three parents of students or graduates of one, four-year certificate program of study, participated in phone interviews, where they were asked about their young adults’ college experiences. Data were analyzed using constant comparative methods. Several themes were identified, including desired outcomes (e.g., development of independent living, career, social skills, and inclusion) and perceived outcomes (e.g., increased levels of social involvement, perceptions of self, and independent living skills). Parents witnessed their young adults gaining new capabilities that resulted from the transition to college, which helped them in the process of “letting go.” These findings enhance our understanding of the benefits that are afforded to individuals and families whose lives have been impacted by the “life-changing” experience of IPSE.

Keywords: Transition to adulthood, intellectual disability, independent living, skill development, perceptions of self

The opportunity to go to college is a reality for most high school students. Until this decade, inclusive postsecondary education (IPSE) was merely a dream for individuals with intellectual and developmental disabilities (IDD). The authorization of the Higher Education Opportunity Act (PL 110-315) in 2008 allowed for the propagation of programs designed to support individuals with IDD in accessing postsecondary education opportunities. A critical agenda of the Higher Education Opportunity Act was the establishment of high-quality, comprehensive, and inclusive transition and postsecondary education programs (Grigal, Hart, & Weir, 2013). This Act turned dreams into reality for many individuals with IDD and their families.

There is a growing body of literature on IPSE. The majority of early research was limited to program descriptions and evaluations of program components (Thoma et al., 2011). More recently, there has been a shift leading to an emerging body of literature documenting outcomes for students with IDD (Grigal et al., 2013). Quantitative studies have linked postsecondary education participation for individuals with IDD to improved rates of employment (Butler, Sheppard-Jones, Whaley, Harrison, & Osness, 2016; Migliore & Butterworth, 2008; Miller, DiSandro, Harrington, & Johnson, 2016; Moore & Schelling, 2015; Ross, Marcell, Williams, & Carlson, 2013; Zafft, Hart, & Zimbrich, 2004), independent living (Grigal & Hart, 2013; Miller et al., 2016; Ross et al., 2013), and community participation outcomes (Miller et al., 2016) in comparison to peers with IDD who did not attend postsecondary education. However, authors of each of these studies indicated that results should be viewed with caution due to a multitude of limitations that exist including: (a) the high rate of variance between how IPSE programs are structured (e.g., four-year vs. two-year, residential vs. commuter, inclusive vs. mainstream); (b) the lack of control groups with which to compare IPSE graduates; and (c) the small number of graduates from which programs are based.

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As Henninger and Taylor (2014) noted, there is a “need to consider a wider range of outcomes beyond work, living, and relationships, to give a more complete picture of the transition to adulthood for individuals with IDD” (p. 106). Many of the desired “wider range of outcomes” for IPSE may not be readily measurable through quantitative means. Furthermore, given the complex roles that parents play in the transition process, there is a need to understand parents’ perspectives on the desired benefits and perceived outcomes their young adults experience through IPSE.

Although families are communicating a desire for IPSE options for their young adults with IDD (Grigal, & Neubert, 2004; Hart, Grigal, Sax, Martinez, & Will, 2006), many do not expect these opportunities to be realized (Chambers, Hughes, & Carter, 2004; Martinez, Conroy, & Cerreto, 2012). Griffin, McMillan, and Hodapp (2010) surveyed 108 families of transition-age students living in Tennessee and found that parents wanted IPSE opportunities that: (a) focused on employment outcomes, (b) provided structured social activities, (c) allowed for individual choice in curriculum, and (d) utilized inclusive learning environments. Parents’ highest rated concerns were for their young adult’s safety and ability to function independently.

While little is known about the outcomes parents seek for their young adults with IDD in relation to IPSE, more is known about how they view successful transition to adulthood. Henninger and Taylor (2014) used qualitative analysis of open-ended survey responses to explore the “criteria for success” that parents identified for their young adults with IDD. Occupational and/or functional roles in society were considered top priority by parents, even if these roles were unpaid. Other criteria parents associated with successful transition to adulthood included: moving out of the family home, relationships with peers, skills required for successful daily functioning, independence or independence with support, and reciprocal community relationships. The authors concluded that the results:

suggest families’ goals for their sons or daughters with IDD reach far beyond conventional criteria of success in adulthood in both depth of criteria and breadth of criteria... In other words, success in adulthood was often described subjectively as the individual reaching his or her full potential. (p. 105)

Moreover, interviews with 30 mothers of transition-age young adults with IDD led to similar results, with the authors noting the need to take a more qualitative approach to viewing outcomes of successful transition (McIntyre, Kraemer, Blacher, & Simmons, 2004). Recreational activities and hobbies were noted as the most important component of quality of life for the young adults of these mothers, followed by their child’s basic needs being met, involvement in a social network, and happiness or contentment. The authors also emphasized the disconnect between current federal policy on transition and its overemphasis on employment in comparison to their findings.

Hanely-Maxwell, Whitney-Thomas, and Pogoloff (1995) reported similar results from conducting in-depth interviews with parents regarding the transition process. Parents prioritized their young adult’s development of friendships, constructive use of free time, and residential alternatives outside of the home. They desired social relationships outside of the family with unpaid individuals that resulted in happiness and interconnectedness. While parents desired a balance of work and recreation in their young adult’s free time, “most also indicated that they would settle for filling free time with leisure and recreation activities and anything else that would keep their child happy, safe, and moving forward in his or her development” (p. 7). Furthermore, residential options outside of the home were perceived by families as essential to their young adult’s development of independent living skills and social relationships that extended beyond family members.

Parents may experience a great deal of stress when faced with their young adult’s transition period. Research has clearly found this transition period to be one of the most trying times for a family (Hanley-Maxwell et al., 1995). While parent involvement is one of the most commonly cited predictors of successful transition (Foley, Dyke, Girdler, Bourke, & Leonard, 2012), it becomes a balancing act as parents walk the tightrope of not undermining their young adult’s self-determination and independence, while being strong advocates and negotiating the complex provider system. Furthermore, parents’ concern for the safety of their young adult is acknowledged as a common barrier in the transition process, as parents’ “over-protectiveness” often leads to hindered development of social skills and choice-making, often resulting in isolation.

Given the need to better understand IPSE outcomes for students with IDD, and recognizing the important roles that parents play in supporting their young adults throughout this transition period, the study sought to explore: (a) what parents hoped their son or daughter with IDD would gain from an IPSE experience, and (b) what these parents believed were the outcomes of their young adults’ IPSE experience.
Method

To explore parents’ perceptions of how their young adult benefited from participation in IPSE, parents of the Integrative Community Studies (ICS) certificate program at the University of North Carolina Greensboro (UNCG) were recruited for enrollment in this qualitative study. The study explored what parents hoped their young adult would gain, as well as the outcomes they had observed in their son or daughter, as a result of the IPSE experience.

Integrative Community Studies at the University of North Carolina Greensboro

ICS is a four-year certificate program of study offered by the Office of the Provost of UNCG, and coordinated by the Office of Comprehensive Transition and Post-Secondary Education (http://beyondacademics.uncg.edu/academics/). ICS was founded in 2007 as a grassroots initiative driven by parents of young adults with IDD. ICS became fully accredited by the U.S. Department of Education as a Comprehensive Transition and Post-Secondary Education program in 2011. ICS has graduated 57 students and currently enrolls 60 students.

ICS encourages students to meet their learning objectives through individualized plans of study that focus on self-determination, career development, and life planning. Student plans include a variety of interdisciplinary courses related to career goals and student interests. Students also complete certificate-based courses that teach them about adjustment to college life, financial literacy, self-advocacy, self-determination, and career development. The career development courses provide students with opportunities to develop their resumes, interview skills, job search strategies, and skills necessary to complete an application. Students also participate in service-learning experiences and internships, which help them further develop these newly acquired skills.

Students receive academic and advising support that supplements university supports and resources. Students work closely with their advisors to explore the principles of strategic life planning, which culminates in a post-graduation portfolio that serves as a summary of the knowledge and skills that have been acquired through the program.

ICS students are fully included in campus life. They have access to academic resources and courses that are consistent with their career and life goals. They have become involved in co-curricular activities such as campus clubs, ministries, activity boards, intramural and club sports, and sororities/fraternities. They also participate in new student orientations and tours, work out in the recreation center, attend intercollegiate sporting events, and participate in graduation ceremonies. ICS students are part of the fabric of the campus community.

ICS students live among the general UNCG student body in campus housing or in privately owned apartment complexes for college students that are adjacent to the university. ICS students have randomly assigned roommates from the general student body until they find fellow students with whom they wish to share housing. A combination of paid supports and volunteers assist ICS students in having a comprehensive university experience that prepares them for life following graduation.

Data Collection

Prior to implementation of the data collection processes, study procedures and materials were submitted and approved by the UNCG Institutional Review Board. Parents of all current and graduated ICS students were emailed an invitation to participate in this study, and interested participants completed the informed consent documents. A telephone interview was scheduled once all potential participants’ questions concerning the study had been answered and their consent forms were received. Telephone interviews, guided by a semi-structured interview guide, ranged from 40 to 90 minutes in length. Parents were asked: (a) why they thought it was important for their son/daughter to attend college, (b) what they hoped their young adult would gain from attending college, and (c) what actual gains, benefits, and outcomes they observed in their student/graduate? Telephone interviews were digitally recorded and transcribed verbatim.

Twenty-three parents participated, representing 22 students (two freshmen, two sophomores, five juniors, and eight seniors; n = 17) or graduates (n = 5) of ICS (see Table 1 for demographics on the participants and their young adults). All but two respondents were mothers. Disabilities represented among students included ID (n = 11), autism (n = 5), Down syndrome (n = 3), ID/autism (n = 2), and cerebral palsy/visual impairment (n = 1). Student (n = 17) IQ’s ranged from 41 to 69 with a mean of 58.5 (SD = 7.84). Sixty-eight percent (68%) of the represented students and graduates were Caucasian, 27% African-American, and 5% Asian. Females comprised 64% of the students/graduates. The demographics of the represented students in the study versus the population from which they were drawn matched closely, except females were somewhat overrepresented in this study.
Data Analysis

Data were analyzed using constant comparative methods (Patton, 2002), which allowed common phenomena to be identified across interviewees in a descriptive analysis approach. Interview transcripts were read multiple times, independently by the primary author and two research assistants, and were followed up with in-depth discussions to identify key content areas and potential codes. Based on these discussions, a coding system was developed (e.g., cooking, riding the bus). The researcher and assistants conducted independent data coding as an initial data reduction strategy, followed by a coding comparison. When differences in coding were identified, the data and coding system were discussed until consensus was reached. Memos were developed to document how differences were resolved, contributing to the final refinement of codes.

Coded data were reviewed by the primary researcher to identify categories connecting codes (e.g., codes such as riding the bus, riding the train, and using campus transportation, were grouped into the category of “transportation”). Themes (e.g., independent living skills) across categories were then identified. Memos were used to further define the properties and dimensions of the identified themes. Cross-interviewee analysis was conducted to determine whether patterns were consistent across interviews and to ensure the proper fit of thematic relationships.

Findings

A number of themes emanated from the data. Parents were adamant that it was their young adult’s desire to attend college, rather than the parents’ preference. Parents desired several outcomes for their young adults that they perceived as only being possible through participation in IPSE, such as: (a) a typical college experience as an opportunity to learn valuable independent living skills, (b) opportunities for inclusion and to learn from peers without IDD, (c) development of social relationships and supports, (d) development of career skills and employment opportunities, and (e) the college experience as a stepping stone to the real world. Themes that arose from the data regarding outcomes that parents perceived included: (a) independent living (i.e., use of public transportation, personal care, handling personal affairs, financial management, use of technology), (b) perceptions of self (i.e., self-esteem and self-confidence, pride, advocacy, increased expectations of self), (c) social life and friendships, (d) campus and community involvement, (e) conversational skills, (f) happiness, (g) employment, and (h) “letting go” as parents. Additional quotes related to each theme can be found in Table 2.

Choosing to Go to College

Parents communicated that their young adults made the choice for themselves to attend college in most cases by instigating the search for college opportunities. Oftentimes this was triggered by having a sibling or friend who was planning to attend or was already attending college. Several parents described feelings of “sadness,” as they did not want their son/daughter to face the disappointment of not being able to live out their dreams, before realizing IPSE was an option.

Desired Outcomes

Independent living. Parents communicated their belief that the responsibilities associated with the “college experience” would provide valuable opportunities for their young adults to develop essential independent living skills. This included skills necessary for taking care of one’s personal care needs, doing the laundry, cooking, housekeeping, financial management, time management, and problem-solving. They believed that this was true of typically developing young adults who attended college, and therefore, should be so for their young adults’ development.

Several parents communicated concern that their young adults would be unable to further develop their independent living skills if they remained at home. One mother stated, “It’s hard to teach someone independence when they’re still living with you and you’re doing everything for them” (P16). A few interviewees actually referred to their young adult as having “plateaued” at home regarding skills for independent living. In order to develop independent living skills, several parents believed their son/daughter needed to live on campus, and far enough away from home to avoid being tempted to intervene in their child’s development. However, parents were cautious and desired their son/daughter to learn these skills in a “safe” environment with the “necessary supports” available. One parent admitted to being tired, when she opined:

It just took a load off of me to know that he is learning the skills that he needs to survive this world, and there are other caring people out there to assist him. It has just lightened up my life a whole lot because I was stressed out for a long time. (P12)

Social relationships. Parents believed the inclusive nature of ICS and the UNCG campus would pro-
vide opportunities for their young adult to develop and maintain social relationships. When addressing inclusiveness, parents identified engagement with peers [matriculating students] in classrooms, campus and community activities, and living arrangements as key components of the college experience. Parents believed that the myriad opportunities to participate in social activities on campus went well beyond the opportunities that were available to their sons and daughters in their home communities. They believed these opportunities provided their young adults with experiences and peer role models that contributed to their social growth.

Parents also believed that their sons/daughters were not the only individuals on campus who learned and benefited from the presence of students with ID. A parent of a freshman declared, “I think the campus community has something to learn from these students. Just because they learn a little differently, they too can succeed and persevere” (P1).

**Career skills and employment opportunities.** Career skills and employment opportunities were almost always listed as desired outcomes by parents, but they were rarely considered to be the highest priority. For many, being able to make a valuable contribution to society was as important as their young adult being able to obtain employment. For example, a father of a senior hoped that “she would be able to live somewhat independently and have some type of job, employment, or just that she could do something to make a valuable contribution to society” (P11).

**College experience as a stepping stone to the real world.** Several parents specifically mentioned or alluded to the perception that the “college experience” represented a vital “stepping stone” to the “real world” for their young adult. One parent described it as an “opportunity to be in the real world with real people. Going to school...You’re young, you’re going to college. That’s absolutely huge” (P5). Many parents described their young adults’ secondary schooling as having occurred primarily in segregated settings. Families felt it was important to have the IPSE opportunity as a “stepping stone” between the sheltered world of a segregated high school to living independently in an inclusive community without attempting to make that leap all at once.

**Perceived Outcomes Through an IPSE Experience**

Parents identified several perceived outcomes for their sons/daughters through participation in the IPSE. The two most prominent outcome-related themes were independent living and perceptions of self. Within the theme of independent living, there existed a number of subthemes, including: (a) using public transportation, (b) personal care, (c) handling personal affairs, (d) financial management, and (e) use of technology. Subthemes within perceptions of self included: (a) self-esteem and self-confidence, (b) pride, (c) self-advocacy, and (d) increased expectations of self. Additional outcome-related themes included conversational skills, social relationships, campus and community involvement, happiness, and employment.

**Independent living.** Many parents stated that a desired outcome for their student when entering college was the development of skills in support of independent living. Most parents communicated having some apprehension and doubt when their son/daughter enrolled in the program. They questioned whether it was realistic for their young adult to live on their own following graduation. Nevertheless, families began to believe that independent living was a possibility as they witnessed their young adult begin to successfully negotiate the challenges of adult life during their college years. One parent of a sophomore happily expressed, “We really believe now that she will be able to live on her own and take care of herself” (P3). The mother of a junior shared, “I never dreamt that she would be living in an apartment by herself. And she was there all last summer by herself, not even roommates were there” (P6). Another parent was pleasantly surprised that her female graduate was, “living alone, and we live one and half hours away” (P20). A parent of a senior proudly stated, “I never imagined that we would be buying a house for her to live in on her own, which we are... So it’s a dream come true, literally!” (P10).

Parents acknowledged that their young adults would likely need some support (e.g., assistance with finances) to be capable of living in their own residence. However, they also identified several essential independent living skills that their sons/daughters acquired in the program. Acquired skill areas included: use of public transportation, personal care, handling personal affairs, financial management, and use of technology.

**Use of public transportation.** Upon entering the IPSE, a majority of the students had minimal experience with public transportation. Some students lacked basic mobility and pedestrian safety skills upon their arrival. Parents described students currently using local public transportation in addition to the campus transportation system. Several parents were in awe of their young adults not only mastering independent use of public transportation within the city limits, but also across long distances (e.g., trains).
These skills made it possible for individuals to return to their hometowns during university holidays and on an occasional weekend. Parents noted that the development of transportation skills boosted their young adults’ participation in community activities.

**Personal care.** Parents spoke of their student’s or graduate’s increased ability to manage personal care. This area included showering, washing hair, and the use of personal care products. Parents also addressed the acquisition of skills for taking care of their living space, such as doing housework and laundry. They also learned how to make meal plans and grocery lists, as well as buying groceries on a budget. In addition, many students developed basic cooking skills. For some, this included the development of healthy eating habits. Some parents remained concerned that their young adults’ eating habits were not quite healthy enough.

**Handling personal affairs.** Parents often identified how their student/graduate became more responsible for their day-to-day affairs. Parents recognized the development of time management skills, being responsible for assignment due dates, and use of personal planners. Handling one’s personal affairs also included learning to adhere to one’s medication schedule and getting new prescriptions when needed. Parents also described the development of important problem-solving skills (e.g., how to locate an item they had lost).

**Financial management.** Parents described significant progress in their young adult’s ability to handle financial responsibilities. One mother of a sophomore described her daughter as being able to “track her spending and her expenses” (P4). A parent of a senior stated, “She is writing checks for bills and getting better at putting notes in a calendar regarding needing to write checks. She writes checks for rent, for GTA [public bus system] passes, etc. on her own now” (P17). Another parent of a senior referred to how her son developed money saving skills, “He knows when he gets paid to go to the bank and have his check cashed and deposit the money that he puts away for savings” (P15). A parent of a graduate indicated that her daughter was still using these skills two and a half years following graduation, stating:

> She is really good at managing her weekly money. She understands that if she spends extra money on something, that she doesn’t get to go out and have dinner with her friends and things like that... She writes her own apartment rent check. (P20)

While parents were proud of the financial management skills that their sons/daughters developed, none of the parents believed their young adults would ever become totally independent financially. All parents acknowledged that some level of ongoing support with finance management would be necessary in their child’s life.

**Use of technology.** Having the ability to use technology is critical for engagement in society. Parents cited a number of technological skills their young adults developed while in college. They included using a smart phone and applications to assist with time management and independent living, email, social media, and internet research. Parents referred to technology as “opening up new worlds,” allowing individuals to remain socially connected and supporting their independent living (e.g., putting reminders in calendars to pay rent). One parent described how she was on the phone with her graduate who was simultaneously using FaceTime on his iPad to show her what was occurring so that they could problem-solve a situation together. Peer companions and staff alike worked together to develop strategies to increase his use of technology which was negligible when entering IPSE. Prior to graduation, he became competent with his cell phone and he currently uses multiple technologies simultaneously.

**Perceptions of self.** Parents often described their student/graduate as having increased self-esteem, self-confidence, and pride as a result of college. Parents described their young adults as becoming “self-advocates.” They also described how they had increased expectations of themselves as a result of their college experiences.

**Self-esteem and self-confidence.** As students acquired new skills, developed social connections, and took on greater responsibility for their own affairs, parents noticed their young adult’s self-esteem and confidence improving. One parent described this outcome as overcoming “learned helplessness.” A parent of a senior indicated that her daughter’s increased self-confidence would be connected to fewer support services post-graduation, stating, “She’s going to be able to use less formal services because of her greater skills and her self-confidence and her confidence to be alone” (P10).

**Pride.** Parents described a new sense of self-worth being demonstrated by their young adults. For some, it was pride associated with being a student or graduate of college. Others demonstrated confidence in what they were learning in college, as this mother explained, “She says stuff all the time that I’m like, ‘Where did you get that,’ and that’s when she says, ‘I’m in college’” (P6). For others, it is pride in the skills they are developing, with the mother of a senior stating, “He is taking more initiative, being proud of
the decisions that he is making as far as his self-care or choices in who he spends his time with.” (P13). A parent of a graduate opined, “It has taught her that she can be her own person. That ‘Yes, I can go to college. I can go to college like everyone else and I can finish college and be an alumni of UNCG’” (P23).

**Self-advocacy.** Parents described their sons/daughters as developing a better understanding of and standing up for their needs and preferences during the college years. Several parents described their young adults as beginning to understand their disability and rights. A few parents provided specific examples of their young adult demonstrating self-advocacy skills such as negotiating with an apartment complex to paint curb cuts bright yellow, challenging service provider agencies for better services, letting family members know when they are going against their wishes, and addressing the city council to have a crosswalk added to a four-lane wide intersection so that he could access work in a safe manner.

**Increased expectations of self.** Parents explained that as their son/daughter developed new skills, their self-perceptions improved. Consequently, their expectations concerning their future also shifted. One mother of a senior linked these concepts by offering, “She is now saying that she wants to live independently. Her having experienced success has opened up her ideas for additional opportunities. She now has her learner’s permit and wants to drive” (P17). Other broadening expectations included being able to live independently, maintain employment, establish intimate relationships, and have children.

**Conversational Skills.** Parents noted that their young adults became more conversational and social. These students/graduates did not simply speak more, but were demonstrating increased reciprocity within their conversations. Students/graduates were also participating in conversations across a broader spectrum of topics, and were demonstrating accompanying social skills (e.g., eye contact and active listening). Parents of students with autism spectrum disorder were most vocal about these improvements in communication. They noticed their students moving beyond rote conversational messages, and gaining intricate nonverbal communication skills such as inflection and improved ability in sequencing the elements of their message. Many parents described changes in their son’s/daughter’s communication and conversational skills soon after starting their college experience with continual progress being made throughout the college years.

**Social life and friendships.** Parents discussed how their young adult became involved in social opportunities and developed friendships during college. While many friendships were with other ICS students, several were with matriculating students. Several parents witnessed their young adult developing genuine friendships for the very first time. Parents of students on the autism spectrum were especially surprised by this outcome. Parents of graduates were particularly pleased to observe that many of these social relationships were maintained beyond the college experience. Nevertheless, several parents wished that their son/daughter had developed additional social connections with matriculating students.

**Campus and community involvement.** Parents attributed much of their young adult’s social success to their increased involvement in campus and community activities. Parents identified a variety of campus events (i.e., basketball, baseball, and soccer games), activities (i.e., intramural and club sports, rock climbing at the recreation center), and memberships (i.e., clubs and campus ministries) in which their young adults participated. They described their student’s/graduate’s engagement in community activities such as community groups, volunteering, and church.

**Happiness.** The happiness of their student/graduate was a topic commonly identified by parents. For many, seeing their son/daughter as a “happy person” was priceless. Others in the family’s social network also noticed this increased level of happiness. Several parents expressed the importance of this outcome, not only because it made them, as parents, feel better, but also reflecting on the prevalence of depression among those with IDD.

**Employment.** The desire for their son/daughter to be employed upon graduation from college was met for some parents. A parent of a graduate explained how her daughter participated in Zumba for the first time during the IPSE experience, leading to a newfound passion that also doubles as a source of income, “She is a certified Zumba instructor. She teaches two classes” (P20). The parent of a recent graduate explained that her son had not yet obtained employment, but that he had learned many of the skills necessary to seek and gain employment.

Several parents expressed disappointment in their student not yet finding a job. While some parents may have been unsatisfied with this outcome, it should be noted that research indicates that ICS graduates are outperforming their peers who have not taken part in such an experience. A post-graduation survey noted that 84.6% of the graduates of the program had been employed since graduation from IPSE, and 61.5% were currently employed at the time of the survey (Miller, DiSandro, Harrington, & Johnson, 2016). Findings from the NLTS-2 indicated that
The findings provide timely insight into what parents value most as a result of their son/daughter’s participation in IPSE. Given the important role that parents provide in the lives of these students, and the significant financial and emotional investments they make on their behalf, it would behoove IPSE programs to include these variables in evaluating the success of their programs.

These findings are consistent with the literature on parents’ desires for their transition-age children. They fall in line with what Henninger and Taylor (2014) identified as parents’ “criteria for success” for transition into adulthood, including moving out of the family home, relationships with peers, skills required for successful daily functioning, independence or independence with support, reciprocal community relationships and occupational or functional roles in society. Furthermore, just as Grigal and Neubert (2004) and Hart et al. (2006) found, parents did not expect these independent living outcomes to actually be realized. Despite having made significant financial and emotional investments on behalf their son’s/daughter’s college education, parents in this study openly admitted that when their child first enrolled in the program, they were apprehensive as to whether their young adult would ever be able to live independently. It was only when parents witnessed their son/daughter successfully navigating adult life and independent living did they begin to believe. Parents were able to raise their expectations as their sons and daughters experienced multiple successes as young adults.

These important outcomes would not be possible, however, without access to matriculating courses with appropriate supports. With this in mind, the AHEAD White Paper on Students with Disabilities and Campus Disability Services (Association of Higher Education and Disability, 2010) provided guidance on the role that Disability Services should play in support of students with intellectual disabilities on college campuses. This report stated, “Disability Services professionals have the responsibility to become educated about the changes in the HEOA and the ways in which they can support students with intellectual disabilities within their institutions” (p. 1). While supports for independent and community living may fall beyond the scope of supports to be provided by Disability Services, “a SWID participating in courses or a program on campus, even though not admitted through the usual matriculating process, is eligible (otherwise qualified) to receive accommodations, just as a student with a disability taking a continuing education class would be” (p. 3). It appears that when families, IPSE programs, and Disability Services professionals take on the responsibility of meeting the
learning and living needs of students with IDD, important outcomes evolve.

These results should be viewed with caution. The findings are limited to the experiences of a small number of students/graduates with IDD at one university. Further research is needed to determine whether these findings are consistent with those obtained through other IPSE experiences.

**Conclusion**

The Higher Education Opportunity Act (HEOA) of 2008 has provided many individuals with IDD opportunities to reach new heights through postsecondary education. Myriad high quality and comprehensive programs have helped young adults transition to adulthood, and have turned dreams into reality for many nontraditional students and their families. Including parents as integral partners in this process has contributed positively to the delivery of these postsecondary opportunities. Parents, as gatekeepers to these college experiences, working in tandem with IPSE programs and Disability Services professionals, help make continuing education a reality. By sharing their hopes, dreams, and goals for their adult children, inclusive postsecondary education programs have served these students well.

American society has come a long way toward the inclusion of individuals with IDD through increased employment, greater opportunities for independent living, and enhanced participation in the community. That said, it was noted in the current study that it was typically the young adult’s desire to attend college, and not due to parents’ prompting. Like their college-age peers without disabilities, the comprehensive and inclusive postsecondary experience served as an important “stepping stone” to the adult world. Career skills acquisition, friendship development, appropriate use of leisure, and learning to live independently were among the salient outcomes noted.

Although parents will continue to have significant influences on the overall health and well-being of their young adults, it was learned that a degree of “letting go” proved helpful to all parties. Family members came to the realization that many children’s skills and sense of self actually plateau at home, and it may be necessary to instigate and support their young adults continuing their schooling away from home. These “life-changing” experiences become exceptional opportunities for students to transition to adulthood. Also, they often become perspective-changing and eye-opening experiences for parents. Furthermore, accessible and accommodating postsecondary educational opportunities should continue to play a critical role in ensuring that the larger society benefits from a more broadly educated and prepared populace.

**References**


### About the Authors

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Lalenja Harrington received her B.A. degree in psychology from Princeton University, her M.A. in mass communication from UNC-Chapel Hill, and her Ph.D. in educational studies from UNCG. She worked in the field of disability advocacy and outreach for 10 years before joining Beyond Academics at UNCG, where she is currently the Director of Academic Program Development and Evaluation. Her research interests include participatory, community engaged, arts-based methodologies, as well as critical pedagogy and UDI. She can be reached by email at: l_harrin@uncg.edu.
### Table 1

**Participant and Student/Graduate Demographics**

<table>
<thead>
<tr>
<th>Participant ID Number</th>
<th>Relationship to Student/Graduate</th>
<th>Disability (IQ, if provided)</th>
<th>Age at Time of Interview</th>
<th>Gender</th>
<th>Race</th>
<th>Year in College</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Mother</td>
<td>ID (63)</td>
<td>19</td>
<td>Female</td>
<td>Caucasian</td>
<td>Freshman</td>
</tr>
<tr>
<td>P2</td>
<td>Mother</td>
<td>Autism (66)</td>
<td>19</td>
<td>Female</td>
<td>Caucasian</td>
<td>Freshman</td>
</tr>
<tr>
<td>P3</td>
<td>Mother</td>
<td>ID (57)</td>
<td>22</td>
<td>Female</td>
<td>Caucasian</td>
<td>Sophomore</td>
</tr>
<tr>
<td>P4</td>
<td>Mother</td>
<td>Autism (69)</td>
<td>19</td>
<td>Female</td>
<td>African American</td>
<td>Sophomore</td>
</tr>
<tr>
<td>P5</td>
<td>Mother</td>
<td>ID (56)</td>
<td>32</td>
<td>Male</td>
<td>Caucasian</td>
<td>Junior</td>
</tr>
<tr>
<td>P6</td>
<td>Mother</td>
<td>ID/Autism (64)</td>
<td>22</td>
<td>Female</td>
<td>Caucasian</td>
<td>Junior</td>
</tr>
<tr>
<td>P7</td>
<td>Mother</td>
<td>Down syndrome (58)</td>
<td>36</td>
<td>Female</td>
<td>Caucasian</td>
<td>Junior</td>
</tr>
<tr>
<td>P8</td>
<td>Mother</td>
<td>ID (61)</td>
<td>22</td>
<td>Female</td>
<td>Caucasian</td>
<td>Junior</td>
</tr>
<tr>
<td>P9</td>
<td>Mother</td>
<td>Autism (57)</td>
<td>25</td>
<td>Male</td>
<td>Asian</td>
<td>Junior</td>
</tr>
<tr>
<td>P10</td>
<td>Mother</td>
<td>Cerebral palsy/visual impairment</td>
<td></td>
<td>Female</td>
<td>Caucasian</td>
<td>Senior</td>
</tr>
<tr>
<td>P11</td>
<td>Father</td>
<td>ID</td>
<td>24</td>
<td>Female</td>
<td>Caucasian</td>
<td>Senior</td>
</tr>
<tr>
<td>P12</td>
<td>Mother</td>
<td>ID (65)</td>
<td>22</td>
<td>Male</td>
<td>African American</td>
<td>Senior</td>
</tr>
<tr>
<td>P13</td>
<td>Mother</td>
<td>Down syndrome (67)</td>
<td>24</td>
<td>Male</td>
<td>Caucasian</td>
<td>Senior</td>
</tr>
<tr>
<td>P14</td>
<td>Mother</td>
<td>ID/Autism</td>
<td>22</td>
<td>Male</td>
<td>African American</td>
<td>Senior</td>
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<tr>
<td>P15</td>
<td>Mother</td>
<td>Autism</td>
<td>22</td>
<td>Male</td>
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<td>Senior</td>
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<tr>
<td>P16</td>
<td>Mother</td>
<td>Down syndrome</td>
<td>25</td>
<td>Female</td>
<td>Caucasian</td>
<td>Senior</td>
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<tr>
<td>P17</td>
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<td>ID (64)</td>
<td>22</td>
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<td>Senior</td>
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<tr>
<td>P18</td>
<td>Mother</td>
<td>ID (61)</td>
<td>26</td>
<td>Male</td>
<td>Caucasian</td>
<td>8-months post-grad</td>
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<tr>
<td>P19</td>
<td>Mother</td>
<td>Down syndrome (48)</td>
<td>32</td>
<td>Female</td>
<td>African American</td>
<td>9-months post-grad</td>
</tr>
<tr>
<td>P20</td>
<td>Mother</td>
<td>ID (48)</td>
<td>29</td>
<td>Female</td>
<td>Caucasian</td>
<td>2 ½ years post-grad</td>
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<tr>
<td>P21 &amp; P22</td>
<td>Mother &amp; Father</td>
<td>ID (50)</td>
<td>30</td>
<td>Male</td>
<td>Caucasian</td>
<td>4-years post-grad</td>
</tr>
<tr>
<td>P23</td>
<td>Mother</td>
<td>ID (41)</td>
<td>28</td>
<td>Female</td>
<td>African American</td>
<td>4-years post-grad</td>
</tr>
</tbody>
</table>
Table 2

Supporting Quotes

<table>
<thead>
<tr>
<th>Theme/Subtheme</th>
<th>Topic</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choosing to Go to College</td>
<td></td>
<td>“She really wanted to go to college. She has an older sister who went to college and she wanted to do exactly what her older sister did. And at first it made my husband and I very sad because we thought there’s no way, that can’t be true for her, no matter how hard she works.” (P2)</td>
</tr>
<tr>
<td>Desired Outcomes</td>
<td>Independent living</td>
<td>Types of skills associated with college experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Living independently makes you develop problem-solving skills, time management skills, and life skills in general.” (P17)</td>
</tr>
<tr>
<td></td>
<td>Plateaued at home</td>
<td>“I thought it was really important for her to get away from home where we were all sort of in a rut… she was starting to plateau on her ability to be independent, maximally independent. And it just felt like it was a great opportunity to push the envelope to areas in which especially, me as mom found it hard to keep working on.” (P10)</td>
</tr>
<tr>
<td></td>
<td>Away from family’s influence</td>
<td>“If he was here in [home town] then we’d be dropping by all the time. ‘Let’s go check on [student’s name], let’s go make sure he has enough food.’ Your parents love you the most, but I think sometimes they’re your worst enemies because it’s so easy to get back into that ‘well, let me do this for him.’ And now he’s an hour away. If he needs food, he needs to walk to the store and get food. He’s got to figure things out on his own.” (P5)</td>
</tr>
<tr>
<td></td>
<td>But in a safe environment</td>
<td>“I wanted her to have the opportunity to go to a place where she felt valued and had an opportunity to experience what other kids experience in college, but it had to be in a safe environment…Safe environment meaning that she’d have the support that she would need.” (P1)</td>
</tr>
<tr>
<td>Social Relationships</td>
<td>Inclusive nature of UNCG and opportunity to learn from peers</td>
<td>“There is greater exposure to peers without disabilities, giving them an opportunity to befriend individuals who may become natural supports...These peers may also be good role models; they also may not, but it’s worth the gamble.” (P20)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“[If they were not in college] they wouldn’t be around typical college students and typical college social life. The learning from this experience is so broad, it is hard to capture. College life is such a significant growth opportunity for those fortunate enough to have that experience. ICS students live with typical roommates, socialize with UNCG students, and attend UNCG classes…They have the opportunity to make life-long friendships with typical college students.” (P21)</td>
</tr>
</tbody>
</table>
Impact on matriculating students

“We’ve always believed that the world is a better place, and individuals with disabilities can be healthier and happier if everyone’s mixed up in a community. So the extent to which people are segregated with disabilities, the world is not going to get to know them, and they’re not going to be able to offer their gifts and contributions. And people with or without disabilities have a lot to offer each other and when you segregate them, it’s not right, ethically, morally, to me personally, but I also think it’s almost impractical. It’s not the best way for the world to get the best of everybody’s.” (P10)

Career Skills and Employment Opportunities

General

“So we hoped that he would gain vo-tech skills of some sort, employability.” (P18)

“I don’t want to see her kind of down to a very limited income. I think she is capable of being gainfully employed and so I think that that’s another thing. Just seeing her maybe being able to utilize a certificate for employment or for self-employment. Just whatever she gains from that part of it academically to be able to benefit her in the workforce.” (P4)

“Not the most important outcome

“What I would hope is that she find a friend or friends to live with...that they can support each other in a good way...and that she’s able to have a job that she loves and be happy.” (P2)

“...it [employment] is not my greatest priority at all. But I would like to see her more involved in something quasi-employment, whether it’s a volunteer job, that’s fine. I don’t really care about the money as much as the idea that she responsibly get up and go do whatever is on her schedule besides a fun day program or something.” (P10)

“College experience as a “stepping stone” to the “real world”

General

“From my perspective what was most important is looking towards living in the real world, living in society, and contributing in whatever way she can when she becomes an adult. I think it would be quite hard to be so separated through most of her life, through special schools, special programs, you know, one-on-one people helping her, and then all of a sudden say, ‘okay, now go live in an apartment with a friend and interact with the world in a different way, by yourself.’ So this again is sort of the easing in process with the appropriate support that could gradually be withdrawn so she’s able to do it.” (P2)

Perceived Outcomes from Participation in an IPSE Experience

Independent Living

Use of Public Transportation

Pedestrian safety

“When she was in high school she had a mobility teacher that said she would never learn how to cross the street, which she obviously crosses [major roads] all the time [now].” (P16)
<table>
<thead>
<tr>
<th>Theme/Subtheme</th>
<th>Topic</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>“She also learned to navigate the bus system…she rides the Greensboro City bus…Spartan bus [university bus]. And she knows the bus routes and the numbers and she calls and says, ‘Dad I’m going on bus 63 to go so and so or bus 38 back home’ or whatever. She knows how to resolve problems on her own.” (P11)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“He has a seizure disorder…So he’s not going to be able to drive. So being able to take the bus. I mean, now he takes the bus from his apartment to the train station downtown in Greensboro and then the train home on Friday nights. You know, it’s fabulous that he can do that.” (P5)</td>
<td></td>
</tr>
<tr>
<td>Impact on com-</td>
<td>“He is a man about town… He has ultimate confidence in getting anywhere he needs to get when he needs to get… before ICS when he was sitting at home, [he] didn’t know how to get on a bus, didn’t know how to get anywhere.” (P18)</td>
<td></td>
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<tr>
<td>munity participa-</td>
<td>“Housekeeping. I mean changing the sheets on the bed, and knowing when to do that. And folding his clothes, putting them away. Unloading the dishwasher, mopping the floor in the apartment” (P5)</td>
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<td>tion</td>
<td>“Each week she prepares a meal plan and purchases it accordingly using her debit card to pay…She prepares her own meals…does her laundry…cleans her room and shares the common chores to maintain an orderly residence.” (P11)</td>
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<td>Personal Care</td>
<td>“I talked to her over the weekend. She was making eggs. I said, ‘[student’s name] you eat eggs?’ She said, ‘On the weekend I do. There is a lot of protein in eggs. Just on Saturdays or Sundays I eat eggs.’ She never ate eggs at home, no less made them herself. She asked for a George Foreman grill for Christmas.” (P7)</td>
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<tr>
<td>Healthy Eating</td>
<td>“She’s cooking on the stove and cooking healthy meals…So we are really excited for her for that. Because she was always a bit afraid of the oven or the stove and that kind of stuff so that has been very good for her.” (P3)</td>
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<tr>
<td>General</td>
<td>“She has learned to handle her assignments; that was a challenge the first semester. She has learned to check email, which she never did before. Voicemail, which she never did before, she has learned those things. So these kinds of communication, basic communication skills that she never had to do before, she has learned those things. And she has learned about a schedule…now she uses a calendar.” (P2)</td>
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<td>Medications</td>
<td>“…she is usually pretty good at handling that [taking her medications] and getting her prescriptions on time and it used to be [i.e., early college years] we were always reminding her, so I think she’s getting better at those things and wants to do more.” (P7)</td>
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<td>Problem solving</td>
<td>General</td>
<td>“For instance, just this week she calls me, she left her bookbag at the Salvation Army when she went there to volunteer. And I said, ‘What did you do?’ She said, ‘I’ve called them and they have got it stored somewhere, in the closet or behind the desk, and I’ll get it Friday morning. Six years ago it would have been, she would have cried and been bent out of shape…she just knows how to deal with a lot of those problems that she could have never dealt with because if she would have been at home, she would have, we have accepted the resolution to those problems for her. We would have just done them ourselves…So she has learned to do that.” (P11)</td>
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<td>Financial Management</td>
<td>General</td>
<td>“She is really good at managing her weekly money. She understands that if she spends extra money on something, that she doesn’t get to go out and have dinner with her friends and things like that…She writes her own apartment rent check.” (P20)</td>
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<td>Use of Technology</td>
<td>General</td>
<td>[referring to student now having a cell phone] “She took off and it opened up a whole world for her as far as communication with people and texting and she talks to cousins and aunts and uncles…I was just floored at how it seemed to open up communication for her.” (P3) “Like working on a computer. She can find anything. That’s how she troubleshoots too. She will need something like toothpaste, for example. She will need toothpaste; she will sit down on her iPad or computer and she will research and she will say ‘Hey we can go get it at CVS and it’s such and such or Walmart has if such and such.” (P11)</td>
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<td>Perceptions of Self</td>
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<td>Self-Esteem and Self-Confidence</td>
<td>Learned helplessness</td>
<td>“[he had learned] this helplessness thing, you know, ‘help me, help me.’…But you know college helped him like, ‘I don’t need that help.’…being able to know that he can handle things. And he does.” (P22)</td>
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<td></td>
<td>General</td>
<td>“This program is so important to [student] because it’s just a huge boost for his self-esteem.” (P5) “This opportunity allows them to meet new people, learn new things, work on their social skills, learn to navigate a college campus, and take responsibility for their own actions. This is a huge self-esteem booster.” (P17)</td>
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<td>Pride</td>
<td>Being a college student or graduate</td>
<td>“When we first visited the campus after she’d been there for a little while, she showed us around, gave a description of all the buildings. She’s so proud. So she has a great sense of pride and a sense of accomplishment of being there.” (P2)</td>
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<tr>
<td>Self-Advocacy</td>
<td>Have a disability, but have rights</td>
<td>“She loves that class [advocacy]. I think she is learning that she is a little bit different and that there are people that are different and that it doesn’t matter. And that everybody has the right to education and to get a job. I think it has been really good for her.” (P4)</td>
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<td>“Everybody has noticed that he is much more of an advocate and he is much more comfortable having a disability, and being okay about talking about it…now he feels much more comfortable talking about it and advocating for things that he and others with disabilities should and can’t have.” (P14)</td>
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<td>Being a self-advocate</td>
<td>“She went and negotiated with the [apartment complex name] manager to paint curbs cut bright yellow because she was having trouble seeing, and she explained why. And he did it!...She changed provider agencies from [habilitation provider] to [other habilitation provider] and that was because she wasn’t satisfied with the service. And five years ago she wasn’t even aware of a provider agency as an entity and that you could have a choice and that you had a right to go to another service. And all of those things were things I handled. And now she handles them.” (P10)</td>
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<td>“For example, if he is in a situation that he doesn’t want do something, he will speak out…If there is a situation where we want him to come home for the weekend, he will say “No, I don’t want to come home for the weekend. I have things to do.” (P15)</td>
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<td>Increased Expectations</td>
<td>General</td>
<td>“So he has changed in that he really feels like he can go and do anything.” (P14)</td>
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<td>of Self</td>
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<td>“He really didn’t have any expectations on what he could do when he started, and now it’s a job, it’s an apartment, it’s a wife, it’s a circle of friends for dinner parties, it’s volunteering. All those expectations, which he didn’t have any of [before], he just expects those things to be a part of his life [now].” (P18)</td>
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<td>General</td>
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<td>“Now I’ll never forget the first time she called us and told us a story. I mean, she told the story from start to finish perfectly [emphasized]…because she never really use to have a good conversation. It was more one sided and short answers...She has developed communications skills, eye contact, vocabulary, use of phrases, listening, and questioning techniques.” (P11)</td>
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<td>Conversational Skills</td>
<td>General</td>
<td>“So in terms of his verbal ability, what we have seen over the years [while in ICS] is that he is not just saying things that are rote. The timing and the inflection and the volume and the sequence within conversation has matured. It’s not just verbal; it is also that he may be thinking more. The range of words and phrases that he has to choose from has grown. The kind of variety of choices he might draw from for things to say is richer now …he is picking things that are more socially relevant and he also has more choices and he is verbalizing it in a more natural way.” (P9)</td>
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<td>Began early</td>
<td>Social Skills</td>
<td>“I noticed immediately after one month in the program that her communication skills and her social skills had improved greatly…she was able to start conversations, ask questions, and do appropriate responses…Once she enrolled at ICS she was coming home initiating conversations. When I say conversations, I mean more functional conversations. She could ask how are you doing, ask about events, she was just more open…I guess the freedom of being at school and to every day be in contact with students and her peers made a difference.” (P19)</td>
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<td>General</td>
<td>“The change within her friendships. I know she is pretty close with [name of another ICS student] and that is something that she had not had prior to ICS; somebody that she would have that would call her. So she would call lots of people [prior to going to college] and she would Facebook lots of people and message lots of people and invite them to parties and all kinds of other things to try to reach out, but she did not have people that reached back and so I see that as a really great change.” (P4)</td>
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<td>“He calls these people up now and they get together and go out and do things together and that is all I’ve ever wanted for him is to be social and have friends. And he does.” (P12)</td>
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<td>Matriculating peers</td>
<td>“And it was neat to see the students speaking to [graduate’s name]. I was elated when I would be out on the campus with her…and a typical student would say ‘Hi’ to her and she would say ‘Well I know them from X, Y, and Z.’ I thought it was neat.” (P19)</td>
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<td>“One of [graduate’s name]’s best friends was one of his typical college roommates. And they remain best friends…So when [best friend’s name] comes down here, they always go out. They go out to eat and have a beer together. And then [best friend’s name] said, ‘Can [graduate’s name] just fly out to D.C. by himself?’ And I said ‘Why not?’ So [graduate’s name] flew to D.C. by himself…He’s developed some wonderful friendships that have lasted.” (P21)</td>
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<td>Campus and Community</td>
<td>“He is in a bowling league. He has always bowled with Special Olympics and now he is in a league and he has made friends through that.” (P12)</td>
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<td>Involvement</td>
<td>General</td>
<td>“Very good community volunteer. [He] Really likes it and that all came through ICS teaching him how to get out in the community, that he could, if he couldn’t work, he could volunteer. Loves doing it.” (P18)</td>
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<td>Happiness</td>
<td>“She just seems so happy. Oh, that is another thing that she does now, is that she laughs a lot. Outwardly laughs. It just seems like she kept a lot of that hidden before.” (P6)</td>
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<td>Others notice it too</td>
<td>“…she is extremely happy, which is great…her Aunt, especially in the first couple of years would say ‘She looks so much happier.’ One of our neighbors said last year ‘Wow, she just seems so much happier and so much more confident.’ So I think it is noticeable…I think she is a happier, fuller person.” (P7)</td>
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<td>Importance for</td>
<td>“He has been very happy and</td>
<td>“He has been very happy and that is really important. It’s important because so many folks with developmental disabilities have problems with depression…because they feel like they are not a part of life. It’s like sitting by watching life go by. So he has been very, very happy and that means a lot to a parent and you want your child to be happy…he has had the time of his life for four years, so to have him feel that way and be happy for four years where there were many years that he was not because he had some difficulty circumstances in his life, that means everything to a parent.” (P14)</td>
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<td>Employment</td>
<td>General</td>
<td>“…actually has a part time job and he wanted to become an auto mechanic and he has a part time job actually working at an auto shop…he helps with oil changes and state inspections, and rotating tires.” (P15)</td>
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<td>Career related skills</td>
<td>“He knows how to apply to a job…all of those things I would say he’s maintaining. He knows what you have to do. He knows sometimes you have to go online, sometimes you go in. He knows the process.” (P18)</td>
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<td>Parents “Letting Go”</td>
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<td>“I miss him but I know that</td>
<td>“I miss him but I know that I have to let go. I was a protective Mom. I didn’t want anything to happen to him. I wanted his life to be good. I wanted his life to be great and I was overbearing and overpowering him and I had to look at what I was doing. I was doing things because I loved him. I was doing things because I was his Mom and I want to see him succeed. But when I pulled back and I felt secure in the program, he just sprouted.” (P18)</td>
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<td>I have to let go. I was</td>
<td>“It has helped alleviate the fear of letting go…One of the things parents fear the most is letting go…And I also tell parents that when your child is ready you have to have the confidence to let it happen…You have to have confidence in them and you do feel that confidence once you see them going out without fear.” (P19)</td>
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It’s Okay to Teach People with an Intellectual Disability About Their Disability (Practice Brief)

Natasha A. Spassiani¹

Abstract

This paper introduces a newly accredited university programme for students with an intellectual disability (ID). The curriculum is largely based on disability studies pedagogy that creates awareness of the social, political, and economic factors that influence how individuals with a disability navigate society. The aim of the innovative curriculum is to provide students with an ID with a high quality postsecondary education that may better equip them when transitioning from the education sector to employment and independent living. The university programme demonstrates a potential framework for inclusive education and the promotion of a more equitable education system for students with an ID.

Keywords: Postsecondary education, intellectual disability, inclusion, civic engagement

Individuals with an intellectual disability (ID) have been marginalized and ostracized by mainstream society. They have been represented as flawed, in need of pity, and are forced to adapt to/conform to an ableist society (Spassiani & Friedman, 2014). Individuals with an ID have been largely excluded from accessing all levels of civic engagement, including accessing postsecondary education and participating in college life. The disability movement and advocates have played a pivotal role in academic institutions around the world in beginning to examine how they can support equal citizenship of individuals with an ID within their academic community. For these reasons, this paper will present the foundations of a newly accredited university curriculum for students with an ID, and how the curriculum hopes to address the oppression and discrimination individuals with ID encounter. The curriculum will create an awareness about disability so that students with ID may be better prepared to participate in their community post university.

Students with an ID and Higher Education

Until recently, the idea of an individual with an ID attending postsecondary education was an unthinkable thought let alone an attainable dream. Fortunately, legislative acts such as the United Nations Convention on the Rights of Persons with Disabilities (United Nations, 2006), the Individuals with Disabilities Education Act (IDEA) of 2004, the No Child Left Behind Act of 2001, and the Education for Persons with Special Educational Needs (EPSEN) Act of 2004 (Government of Ireland, 2004) have begun to provide individuals with ID the ability to exercise their right to participate in postsecondary education. It is well documented that the completion of any postsecondary education significantly improves an individual’s chance of attaining competitive employment, regardless of disability (Gilson, 1996; National Council on Disability and Social Security Administration, 2000). However, individuals with an ID continue to be more likely to be unemployed or underemployed compared to their peers without disability (Johnson, Mellard & Lancaster, 2007). Grigal and Hart (2010) found that students with an ID have the same goals as their peers without a disability, to attend college and participate in competitive employment. In order to support students with an ID to achieve their goals of not only attending, but successfully completing a postsecondary programme, several inclusive postsecondary education models have been used, such as the mixed/hybrid model, the substantially separate model, and the inclusive individual support model. It is important to note that even with the various models of postsecondary educational programmes, employment and inde-

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dependent living remain low among individuals with an ID (Migliore, Butterworth & Hart, 2009).

**Curriculum**

The debate about whether functional curricula or academic-based curricula are best suited for students with an ID is an ongoing discussion being had by educators at the national and international level (Ayres, Lowrey, Douglas & Sievers, 2011; Bouck 2012; Dymond, Renzaglia, Gilson & Slagor, 2007; Ee & Soh, 2005; Kontu & Pirttimaa, 2010; Wang 2011). Although there is limited research in this area specific to postsecondary education curricula there has been some work examining secondary curricula for students with an ID (Bigge 1988; Bouck, 2012; Edgar & Polloway, 1994; Giangreco, Cloninger & Iverson, 1998; Patton et al., 1996; Ryndak, Moore, Orlando & Delano, 2008-2009; Test, Mazzotti, Mustian, Fowler, Kortering & Kohler, 2009; Wehmeyer, Lattin & Agran, 2001). The two most common types of curricula that students are exposed to are functional and academic-based curricula. More specifically, a functional curriculum is also referred to as a life skills curriculum and is focused on teaching the core skills needed for students to participate in adult life (Browder et al., 2004; Patton, Cronin & Jairrels, 1997; Polloway, Patton, Smith & Roderique, 1991; Wehmeyer, Sands, Knowlton, Kozleski, 2002). The main learning outcome of a functional curriculum is to prepare the student with an ID with the required skills to be successful in independent living and employment (Bigge 1988; Patton et al., 1996). There are concerns that students with an ID who receive a functional curriculum are less prepared for postsecondary opportunities (Ryndak et al., 2008-2009) as they have learned a limited set of skills (Edgar & Polloway, 1994). Conversely, an academic-based curriculum focuses on academic content. The academic-based curriculum can be delivered with or without accommodations (Wehmeyer et al., 2001). For example, students with an ID may receive the same curriculum as their peers, but their assessments or learning outcomes differ (Giangreco et al., 1998).

Bouck (2012) conducted a longitudinal national study in the United States and found no statistically significant difference in postsecondary outcomes (i.e., independent living, attending postsecondary education, and employment) for students who received functional vs. academic-based curriculum. The study found that in general students with an ID reported low rates of employment, independent living, and postsecondary attendance regardless of curriculum type they were exposed too. Examining the differences between functional and academic-based curricula provides a possible explanation for the low success rates for students with an ID due to this group not being educated about how their disability effects not only their learning, but how they interact with and negotiate society with an ID, such as how to manage stigma, discrimination, and prejudice. Students with an ID must be educated about their disability so that they may understand how it impacts their life in regard to learning, employment, life skills, independent living, and social interactions. Understanding one’s disability will allow the individual to better negotiate their environment and advocate for the needed supports to be successful in postsecondary education (Stodden & Whelley, 2004), and to be contributing members of society. It is common that individuals with an ID have not been told by their guardians that they have an ID in an attempt to shield them from the discrimination and oppression that is associated with having a disability, particularly an ID. However, this begs the question: how do we expect individuals with an ID to become independent and become fully integrated in society if they are unaware of their impairment and how it directly influences not only their day to day life, but also how they interact with their community?

**Depiction of the Problem**

Of all students with disabilities, those with ID have been reported to have the poorest post-school outcomes. This is primarily due to lack of opportunity for students with ID to participate in a formalized structured curriculum in higher education institutions. The typical educational opportunities available for students with ID who are 18 years or over are segregated life skills programmes or community-based transition programmes. Inclusive postsecondary education options have begun to slowly replace these vocational programmes and are challenging significant barriers, such as attitudes and low expectations that society has about students with ID being able to be successful in postsecondary education programmes (Hart 2006).

A topic of concern in both the academic and applied community is how we can make society more inclusive for individuals with an ID. How can we make education more inclusive for students with an ID? How can we make employment more inclusive for individuals with an ID? However, these discussions commonly work around the elephant in the room – that is ensuring that individuals with an ID understand the social construction of their disability and how they can be given the tools and skills needed to participate in the wider community with their disability.
There has been an educational movement and increased awareness given in academic settings about marginalized groups. Offering courses/programmes that critically examine the history of how individuals of minority groups navigate society are typically seen in the form of such courses/programmes on LGBT studies, women’s studies, Black studies, and disability studies. These courses/programmes play a pivotal role in not only creating awareness of the importance of civil rights but also allows students to think critically about how individuals of minority groups are viewed by a capitalist society, and how they must navigate the oppression, discrimination, and stigma that exist so that they can experience meaningful inclusion. Although ID would be addressed in disability studies programmes in the university, these programmes are limited and are not typically made accessible for students with an ID. For example, a woman with a physical disability has the opportunity to learn about how gender and disability play a role in how she interacts with society within a higher education setting. Likewise, a nondisabled man has the opportunity to also take part in such academic programmes to learn about the historical and current social, political, and economic factors that influence community participation and integration of minority groups. However, no such opportunities exist for students with an ID as these curricula are not accessible. The rational presented above was the driving factor to develop an inclusive disability studies curriculum for university students with ID.

**Description of Innovative Practice**

The newly accredited interdisciplinary programme aligns directly with evidence-based research suggesting the much-needed shift to providing high standards of postsecondary education programmes for students with ID. The programme has been recently accredited as a Level five major award following the National Framework of Qualification guidelines in Ireland, to address the gap in educational curricula for university students with an ID. The interdisciplinary programme is embedded in disability studies pedagogy where each module is informed by how disability is understood from cultural, social, political, and economic perspectives. Disability studies programmes, which critically examine disability as a social construction, are becoming more commonly offered at the university level. However, a major criticism of these programmes is that they are not inclusive for individuals with ID. By providing a programme for individuals with ID that is embedded in a critical disability studies framework, individuals with ID may have a better understanding of the social construction of disability and be more able to navigate their way within the community. By having such a tailored programme, these individuals may be able to develop and refine the skills needed to advocate for social justice, not only for themselves, but for other individuals with disabilities.

This course has been designed to challenge the traditional viewpoint that people with ID are “noneducable.” It seeks to educate its students, not only in regard to developing life skills, but also in relation to understanding disability from social, political, and economic perspectives. Understanding the social construction of disability and how it impacts on their lives may enable students to participate fully in society and advocate for change. It aims to help students to develop a conscious awareness of how having a disability directly impacts on their ability to meaningfully participate in their community and attain/sustain competitive employment. From a practical point of view, it will also provide successful students with a formal qualification which may enable them to apply and compete for jobs alongside applicants without disabilities, or to pursue further studies. The programme closely aligns with research that has shown that students with ID who have postsecondary experience are more likely to obtain competitive employment, require fewer supports in the community, and earn higher wages compared to individuals with ID without any postsecondary exposure (Hart, 2006).

**Course Content**

The accredited programme is a two-year full-time course offered at a top ranked university in Ireland for the first time in October 2016. The interdisciplinary curriculum was based on the interests of university students with an ID who were currently enrolled at the university. The students provided feedback about their university module and what they would like to see be offered at the university level for future incoming students. The two-year full time programme divides modules into six interdisciplinary themes: (1) advanced learning theories and self-development; (2) applied research theories and practice; (3) applied science, technology, and maths; (4) business and marketing; (5) advocacy, rights, and culture; and (6) fine arts and languages.

The proposed curriculum will provide students with knowledge of multiple academic disciplines, and takes an interdisciplinary approach to examine how disability is influenced and reinforced through the various academic perspectives. Table 1 provides a description of each theme and theme objectives.
Programme Aims and Learning Outcomes

The programme has established standardized programme and module learning outcomes that directly align with the programme aims. More specifically, the programme aims and programme learning outcomes for the programme are described in Table 2.

Course Structure

There are 22 modules, most being 12 weeks in length (one academic term) and others lasting 24 weeks (two academic terms). The programme is offered as a level five major award. The overall aggregate mark of both years will be the credit-weighted average of the module marks. Each year contributes 50% in the calculation of the award result. The Certificate will be awarded as a pass, merit, or distinction. A pass will be awarded at 40%, a merit at 55%, and a distinction at an overall average of 70%, which aligns directly with university undergraduate regulations. Students must be 18 years or older when starting the programme, have an ID, have successfully completed secondary school, and demonstrate reading, writing, and basic math skills to be eligible to apply for the programme.

Each module is designed to provide students with multiple and varied assessments types to ensure the learning styles of students are being taken into consideration. For example, each module encourages collaborative learning and whole class input and discussion; each student receives a learning needs assessment to identify accommodations needed to best suit their learning needs; regular formative and summative assessments will be given in each module to reinforce concepts learned during lectures/labs/tutorials. Assessments are provided in various formats and students are given the choice to decide which format best suits their learning needs; students have designated independent study hours where they have the opportunity to complete assessments with their peers or support from faculty members who teach on the programme.

Institutional Resources

The newly accredited programme was well supported by the university, particularly higher management, academic, and administrative staff. There was an overall agreement within the university that the previously existing programme being offered to students with ID had become tokenistic and not a true exemplar of meaningful higher education. More specifically, the university recognized that it was unjust that their students with ID were attending a two-year programme, however, upon successful completion would not receive any formal qualification recognizing their contributions. For this reason, the university set out to redevelop the programme to align directly with university standards that all programmes must adhere too. An interdisciplinary committee was developed to reconceptualise and develop the new programme. The committee comprised of professors from various academic backgrounds and an occupational therapist to provide input on each of the six interdisciplinary themes.

Committee members were expected to deliver modules on the programme in their respective areas of expertise. The programme coordinator, a disability studies professor, oversees all programme content to ensure that content touches upon disability and how it can be applied to real world settings where appropriate. The majority of professors did not have prior experience working with individuals with ID; however, professors were encouraged to adapt content to the appropriate level. A decision was made to not provide professors with special education training, however, to encourage each professor to view students with ID the same as any other university student. The programme coordinator would meet with professors as needed to offer input and feedback about the delivery of content and ensure professors were being well supported. The professors who taught on the programme were from the School of Education, where the new programme is based and part of their teaching workload included teaching on the programme. For quality assurance, the committee meets monthly to discuss the delivery of the modules, and any issues or concerns with module content or students.

Additionally, students have fortnightly meetings with an occupational therapist during their time in the programme to support students in their personal and professional development. Each student guides the direction of the meeting to what they see is important to them. For example, meetings can range from goal setting, to development of academic skills, to professional development. Meetings with the occupational therapist are kept confidential and are meant to be a resource for students to take advantage of where they feel safe to discuss their needs in a proactive manner.

Future Outcomes and Implications

The newly accredited programme is currently being delivered for the first time and will be closely monitored to ensure that programme aims and learning outcomes are being achieved. Student outcomes such as successful completion, transition, employment, and independent living outcomes will be measured. The occupational therapist sessions will also
be examined for personal development outcomes such as goal setting, communication skills, and organizational skills; as well as examining how the learning needs assessment delivered by the occupational therapist can be used as a benchmark tool for both individual and programme success. Particular attention will be given to examining the experiences of mainstream professors educating university students with ID, such as their ability to adapt and learn to educating students with ID, and personal and professional challenges to overcome. Furthermore, the suitability of inclusive assessments, and the effectiveness of content being delivered will be examined.

Closing Thoughts

The purpose of this paper was to introduce an innovative accredited postsecondary education curriculum for students with an ID being offered at a leading academic institution. Universities have a responsibility to start providing real choice, true inclusion, and high expectations of students with ID. By providing a postsecondary program for people with ID that is embedded in a disability studies framework students may be able to develop and refine the skills needed to truly be included in their communities and participate in all aspects of civic engagement. This type of academic curriculum which is embedded in evidence-based best practice would not only be ground breaking, but has great potential to be the standardized model that other postsecondary institutions can look to when developing similar programs for students with ID.

Individuals with an ID must become educated, not only in regard to developing life skills, but also in understanding disability from a social, political, and economic level. Individuals with an ID must have a conscious awareness of how having a disability directly impacts their lives. The notion of “ignorance is bliss” to shield individuals with an ID from their impairment must be eradicated. Not educating individuals with an ID about disability and expecting them to be contributing members of society is not only unrealistic, but ultimately, and sets up these individuals for failure.

References


**About the Author**

Natasha A. Spassiani received her B.Sc. (Hons.) and M.Sc. degrees in Kinesiology and Health Science from York University in Toronto, Canada. She then went on to the University of Illinois at Chicago to attain her Ph.D. in Disability Studies in the Department of Disability and Human Development. Currently, she is an assistant professor in the School of Health and Social Care at Edinburgh Napier University. Her research interests pertain to understanding the interplay of disability, community, education and health using a social model perspective. She can be reached by email at n.spassiani@napier.ac.uk.

**Acknowledgement**

A special thank you to Ms. Maria Clince for her support with this manuscript.
### Table 1

**Description of Themes**

<table>
<thead>
<tr>
<th>Interdisciplinary Theme</th>
<th>Objective</th>
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<tbody>
<tr>
<td>Advanced learning theories and self-development</td>
<td>This theme focuses on modules which utilize/employ various styles of learning and strategies to support students in their learning throughout the programme. This theme will also focus on helping students to identify personal and professional goals and monitor their progress and development.</td>
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<tr>
<td>Applied research theories and practice</td>
<td>This theme introduces students to research methods and provides students with the opportunity to participate in, and lead their own, research projects.</td>
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<tr>
<td>Applied science, technology and mathematics</td>
<td>This theme includes modules focusing on a variety of disciplines such as: health sciences, environmental studies, and STEM (science, technology, engineering, and math). These modules focus on core topics while providing a practical approach to how these subject areas relate to individuals with disabilities.</td>
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<tr>
<td>Business and marketing</td>
<td>Students are exposed to the fundamental principles of business and marketing. Students are provided with the tools to design a business plan and to lead a marketing project that critically reflects on how disability is portrayed in the business and marketing realm. The modules in this theme provide students with the skills and knowledge to successfully navigate the employment sector. Furthermore, students are required to take part in an eight-week work placement. This provides students with experiential learning skills needed when they transition to the employment sector.</td>
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<tr>
<td>Advocacy, rights and culture</td>
<td>This theme addresses human rights from a global perspective, with an emphasis on disability rights. The modules in this theme provide students with the skills and knowledge needed to navigate services and advocate for their rights and the rights of others.</td>
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<tr>
<td>Fine arts and languages</td>
<td>This theme introduces students to how disability narratives are represented in language, film, art, and poetry. This theme will also explore how these representations influence societal understandings of disability, which ultimately influence the way individuals with disabilities experience and participate in society.</td>
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Table 2

**Description of Programme Aims and Learning Outcomes**

<table>
<thead>
<tr>
<th>Programme Aims</th>
<th>Program Learning Outcomes</th>
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<tr>
<td>• To help students develop the ability to think critically about disability, express viewpoints, engage in logical discussions, and problem-solve effectively within a higher education learning environment.</td>
<td>• Critically identify and reflect on how the construction of disability directly influences the lived experience of individuals with disabilities.</td>
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<tr>
<td>• To equip students with the interdisciplinary knowledge to navigate the community and employment sectors.</td>
<td>• Demonstrate a broad knowledge of interdisciplinary subject areas and how their content relates to disability.</td>
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<tr>
<td>• To develop in students the learning skills required for developing their own person-centred plan when engaged in the wider community.</td>
<td>• Apply an inquiry-based approach to critically identify strategies to facilitate societal change for people with disabilities.</td>
</tr>
<tr>
<td>• To provide students with the learning skills and knowledge needed to confidently advocate for change in their own lives and the wider disability community.</td>
<td>• Articulate and apply arguments, concepts and theories, both orally and in writing.</td>
</tr>
<tr>
<td>• To encourage collaborative learning through project-based tasks incorporating academic content and applied skills to reinforce overall academic, professional and personal development.</td>
<td>• Learn independently and in groups in order to engage optimally in their future studies and employment.</td>
</tr>
<tr>
<td>• To introduce students to academic scholarship, evidence-based interdisciplinary research and university life.</td>
<td>• Identify and use the learning skills required for success at independent living and employment.</td>
</tr>
<tr>
<td></td>
<td>• Apply interdisciplinary knowledge and translatable skills to real world situations, such as when participating in the community or within the employment sector.</td>
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A Financial Literacy Course for Postsecondary Students with Intellectual Disabilities
(Practice Brief)

Joanne Caniglia¹
Yvonne Michali¹

Abstract

Historically, individuals with intellectual disabilities (ID) were limited in the amount of assets that they could earn. However, the enactment of the Achieving a Better Life Experience (ABLE) Act in 2014 provided for significant increases in the amount of earnings and savings allowable. Many of these individuals are capable of saving money and building assets, yet often do not have financial skills. Furthermore, transition–age students with ID also lack the self-determination skills needed to direct their life decisions effectively. Specifically, they lack the nine components of self-determination that include: problem-solving, choice-making, decision-making, goal-setting, self-regulation, goal-attainment, self-efficacy, self-awareness, and self-advocacy. This practice brief describes a financial literacy course within a postsecondary transition program that incorporates financial literacy content taught through the lens of self-determination theory.

Keywords: Financial literacy, intellectual disability, postsecondary transition curriculum, self determination

Virtually all studies of students who are completing high school or in college conclude that they are poorly prepared to make financial decisions in their best interest. Since 2007, Jump$tart surveys, which track financial literacy over time, have found little improvement in students’ knowledge and behaviours. Because of this, programs teaching financial skills have grown in number and prominence. However, few resources are available for students with intellectual disabilities (ID) who have the potential to achieve greater independence and financial awareness (Clark, 2016; Mittapalli, Belson, & Ahmadi, 2009).

For instance, What Works Clearinghouse (WWC), an investment of the Institute of Education Sciences (IES), is a resource that provides educators in K-12 and postsecondary with information needed to make evidence-based decisions. Experts in education, methodology, and dissemination of findings, review existing research on different programs, products, practices, and polices to answer empirically the question “What works in education?” (What Works Clearinghouse [WWC], 2017). Unfortunately, WWC does not provide resources that teach financial skill development for this population at the postsecondary level.

Likewise, there are no resources to teach financial skills for students with ID in a postsecondary setting found at the National Technical Assistance Center on Transition (NTACT, 2015). NTACT, funded by the U.S. Department of Education’s Office of Special Education Programs (OSEP), assists educators, service providers, and state agencies in implementing evidence-based and promising practices preparing students with significant disabilities for success in transitioning into adult life and employment.

Individuals with ID often do not have control of their own finances due to a lack of skills, opportunity, or both (Newman, et al., 2011). These individuals may lack the self-sufficiency to make key decisions about their lives. Research shows that students with ID who have more developed self-determination skills are able to make a more successful transition from high school to adult life (Kochhar-Bryant, Bassett, & Webb, 2009). Students, moreover, who leave high school without developed self-determination skills are ill prepared, and less successful in their adult lives (Wehmeyer & Palmer, 2003). Although the literature supports the importance of self-determination, studies across special education disability categories find that students with ID demonstrate less self-determination than their nondisabled peers (Wehmeyer, Palmer, Shogren, Williams-Diehm, & Soukup, 2013).

In their seminal work, Field and Hoffman (1994) described self-determination as knowing one’s strengths, limitations, needs, and preferences well

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enough to analyze options and goals, and to determine a clear vision for one’s future. Self-determined individuals choose their goals by assessing their needs, and by acting in ways to meet those goals. They are intrinsically motivated to pursue goals, which involves making a presence known, stating needs, evaluating progress toward meeting goals, adjusting one’s performance, and being creative in problem-solving (Martin & Marshall, 1995). Wehmeyer (1996) and Deci and Ryan (2000) identified several behaviours and attitudes defining self-determination namely problem-solving, choice-making, decision-making, goal setting, self-regulation, goal attainment, self-advocacy, self-awareness, and self-efficacy. Each of these skills has a characteristic developmental course acquired through specific learning experiences. It is at this level of the framework that intervention to promote self-determination as an educational outcome can occur (Doll, Sands, Wehmeyer, & Palmer, 1996).

There are few programs that address financial literacy for students with ID that include self-determination skills (Brown & Thaker, 2006). According to Amsbaugh (as cited in Mittapalli et al., 2009), programs and services for youth with disabilities in postsecondary programs are rare and those that do exist have not produced research that has evaluated effectiveness. It is believed that through completion of high school, participation in postsecondary education, and saving for the future, youth with disabilities would be able to obtain satisfying outcomes in employment and economic self-sufficiency and independence. Further, financial education programs/services for youth should include information on financial decision-making (short- and long-term) and career choices/options.

With recent legislation, financial literacy on asset development is an essential topic in curricula for youth with ID so they can make informed decisions about their lives. Asset development is based upon the ability to make sound short- and long-term financial decisions. These abilities include, but are not limited to, investing (i.e., homeownership, stocks); types and benefits of savings; and increasing capacity to save and plan ahead (Mittapalli et al., 2009). One such savings option is an Individual Development Account (IDA) that will not impact their eligibility for federal benefit programs. Similarly, the ABLE Act (P.L. 113-295 [ABLE], 2014) was signed into law on December 19, 2014. This new law permits states to create ABLE programs which would allow qualified individuals with disabilities the opportunity to save money in a tax advantaged account without jeopardizing their eligibility for most federally funded tested programs (including Medicaid and to a certain extent Social Security benefits). Although federal law applies uniformly to all states, individual states may regulate ABLE accounts differently.

Depiction of the Problem

For many persons with disabilities, few opportunities exist for them to acquire the knowledge and skills to make financial decisions; to obtain competitive, compensated employment; and to access financial services in order to build assets. In light of the lack of curricula and recent legislation, the authors developed a financial literacy course for transition-aged persons with ID. The uniqueness of this course is that it provides financial content embedded within the components of self-determination.

Participant Demographics and Institutional Partners/Resources

Participants include 25 transition-aged students with ID enrolled in a four-year postsecondary comprehensive transition program at a Midwestern university.

The mission of this program is to create learning experiences for students with intellectual and developmental disabilities by maximizing opportunities to equip them to become self-determined and autonomous adults. The program integrates inclusive classes, a typical college experience, and a transition curriculum to assist students in achieving adult roles and a quality of life in a community of their choice. (Michali, 2010, para 2)

Of these participants, eight are male and 17 are female who meet the definition of an intellectual and developmental disability, with three students in legal guardianship.

The American Association for Intellectual and Developmental Disabilities (AAIDD, 2010) defined ID as a “disability originating before the age of 18 and characterized by significant limitations in both intellectual functioning and in adaptive behaviour, which covers many everyday social and practical skills” (para. 1). Intellectual functioning, or intelligence, refers to the mental capacity for learning, reasoning, problem-solving, and other life skills. An IQ score below 70-75 indicates deficits in intellectual functioning. Adaptive behaviours, crucial for everyday life, are defined as the collection of conceptual, social, and practical skills. Examples of adaptive behaviours include difficulties with problem solving, money use and management, time, number concepts, daily living, occupational skills, and lack of self-determination skills.
Parental involvement is an important part of this University’s postsecondary transition program. As such, initial and ongoing meetings with parents are required. Each semester, students showcase academic and employment accomplishments to their parents.

**Description of Practice**

The development of this financial literacy course within a postsecondary transition program was accomplished through a five-phase process that was implemented over four-semesters. Details of each phase, corresponding objectives, and outcomes are identified in Table 1. Utilizing project-based instruction, the class met once a week for 75 minutes and instruction was delivered over four semesters. Lessons provided students the knowledge and general understanding of key areas of personal finance necessary throughout their adult lives. Teacher-created assessments for this population were conducted at the end of each unit. Rubrics were used to assess self-determination and financial skills. As a capstone project, participants developed a financial portfolio containing resources and templates.

**Evaluation of Observed Outcomes**

Following each semester, student surveys suggested recommendations that included: (a) more visual content with more real-life resources including role playing and guest speakers; (b) an increase in differentiation based on mathematical ability; (c) more time to complete activities; (d) the need for technology, (e) addition of other topics such as overtime pay, how to save money for leisure activities, etc.; (f) more hands-on activities; and (g) use of real money situations. Based upon results of the surveys, instructors revised presentations, accommodations, and resources.

Additional data indicated that students had difficulty maintaining and recalling strategies that were taught within their classes over time. Although there is evidence of positive impact in knowledge, attitudes, and skills over a short term, additional longitudinal research is needed on students’ lives and their finances beyond the postsecondary experience. To alleviate the effects of financial skill regression, participants created a personal financial toolkit (both electronic and paper) that would remind them of financial terms and resources. Contents of the toolkit included how to access information about a bank, online tools, budgeting apps, and resources that offered financial options for debt and credit.

In focus groups, parents of transition students were asked to discuss their observations of students’ self-efficacy in managing personal finances. Parents credited the financial literacy course in teaching their student to become more financially aware and by demonstrating more conservative spending habits. This behaviour in turn, gave parents greater confidence in allowing more freedom to their young adult to make financial decisions.

**Implications and Portability**

Recognizing the importance of sharing our work with other postsecondary transition programs, the authors have identified recommendations for the development of a financial literacy course for young adults with ID. These recommendations include: keeping the curriculum realistic and project based; designing a course that is culturally sensitive, age appropriate, and relevant for college-age students; utilizing technology; including lessons or modules on asset development; and including parents in the planning process.

Given recent legislation, it is essential for postsecondary programs to bring together the insights and involvement of parents and service providers regarding asset development. It has been demonstrated that the students in a financial literacy class for persons with ID can become more financially capable to direct their life needs. In order for students to maintain skills, it will require that parents and service providers work collaboratively to consistently create opportunities for students to apply their skills as they build assets.

Creating a financial literacy course for persons with disabilities is one part of the solution. The goal of financial literacy and security for adults with disabilities requires the attention, cooperation and investment of government, financial institutions, community non-profit organizations, and families. Educational organizations must take advantage of opportunities to provide financial education to ALL students, improve financial decision making, set financial goals, and provide students with the ability to self-assess financial health.
References


About the Authors

Joanne Caniglia received her Ph.D. in Curriculum and Instruction with an emphasis in Mathematics Education from Kent State University. Her experience includes working as a K-12 teacher and university professor for Eastern Michigan University and Kent State University. Her research interests include making mathematics accessible to diverse populations. She can be reached by jcanig11@kent.edu.

Yvonne Michali received her Ph.D. in Special Education with a specialization in Transition Studies. Her experience includes developing and directing a four-year postsecondary college program for students with intellectual and developmental disability and autism. Research interests include improving self-determination skills for this population.
Table 1

*Phases, Objectives, and Outcomes of Financial Literacy Course*

<table>
<thead>
<tr>
<th>Phase</th>
<th>Objectives</th>
<th>Outcomes</th>
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<tr>
<td>Financial Literacy Skills</td>
<td>Research and identify current financial skill practices and strategies</td>
<td>Two resources suggested by the National Disability Institute include:</td>
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<td>that meet criterion of: evidenced-base targets persons w/ ID postsecondary</td>
<td>1. Jump$tart’s Clearinghouse with Financial Education Curriculum:</td>
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<td>2. FDIC Money Smart for Young Adults</td>
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<td>that meet criterion of: Evidence- or research-based</td>
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<td>Define all 9 skills of Self Determination</td>
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<td>Align financial literacy with principles of</td>
<td>National Jump$tart Standards</td>
<td>Integrated Jump$tart Standards to include nine skills of self-determination (SD):</td>
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<td>self-determination; Identify standards</td>
<td>Operational Definitions of Self-Determination</td>
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<td>Credit &amp; Debit</td>
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<td>Education, Retirement, Home ownership</td>
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<td>Create course curriculum and sequence</td>
<td>Develop a four-course sequence</td>
<td>Course Competencies and Sub competencies</td>
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<tr>
<td>Create course curriculum and sequence</td>
<td>Develop a four-course sequence</td>
<td>Course #1: The Math Behind the Money</td>
</tr>
<tr>
<td>Determine timelines, units, lesson plans, materials needed</td>
<td>Place Value, Counting Money, Percents</td>
<td>Course #2: Financial Planning</td>
</tr>
<tr>
<td>Course #1: The Math Behind the Money</td>
<td>Wants &amp; Needs; Purchasing, Saving, Budgeting</td>
<td>Course #3: Life Events</td>
</tr>
<tr>
<td>Place Value, Counting Money, Percents</td>
<td>Adult Life, Career Choices, Health Care, Retirement, Insurance</td>
<td>Course #4: Financial Institutions</td>
</tr>
<tr>
<td>Course #2: Financial Planning</td>
<td>Banking, Credit Cards, Social Security, Payroll, Taxes, Stocks/Bonds, Investing</td>
<td>Monitor student progress</td>
</tr>
<tr>
<td>Course #3: Life Events</td>
<td>Conduct parent focus group</td>
<td>Financial Portfolio created by students.</td>
</tr>
<tr>
<td>Course #4: Financial Institutions</td>
<td>Student surveys &amp; pre/post-test</td>
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(Table 1, continued)
Manuscripts must be submitted electronically as attachments via email to jped@ahead.org.

Content

Manuscripts should demonstrate scholarly excellence in at least one of the following categories:

- Research: Reports original quantitative, qualitative, or mixed-method research.
- Integration: Integrates research of others in a meaningful way; compares or contrasts theories; critiques results; and/or provides context for future exploration.
- Innovation: Proposes innovation of theory, approach, or process of service delivery based on reviews of the literature and research.
- Policy Analysis: Provides analysis, critique and implications of public policy, statutes, regulation, and litigation.

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All manuscripts must be prepared according to APA format as described in the current edition of The Publication Manual, American Psychological Association. For responses to frequently asked questions about APA style, consult the APA web site at http://apastyle.org/faqs.html

- All components of the manuscript (i.e., cover page, abstract, body, and appendices) should be submitted as ONE complete Word document (.doc or .docx).
- Provide a separate cover letter asking that the manuscript be reviewed for publication consideration and stating that it has not been published or is being reviewed for publication elsewhere.
- Manuscripts should be double-spaced and range in length between 25 and 35 pages including all figures, tables, and references. Exceptions may be made depending upon topic and content but, generally, a manuscript’s total length should not exceed 35 pages.
- Write sentences using active voice.
- Authors should use terminology that emphasizes the individual first and the disability second (see pages 71 - 76 of APA Manual). Authors should also avoid the use of sexist language and the generic masculine pronoun.
- Manuscripts should have a title page that provides the names and affiliations of all authors and the address of the principal author. Please include this in the ONE Word document (manuscript) that is submitted.
- Include an abstract that does not exceed 250 words. Abstracts must be double-spaced and located on page 2 (following the title page). Include three to five keywords below the abstract.
- Tables and figures must conform to APA standards and must be in black and white only. All tables and figures should be vertical and fit on the page; no landscape format. If Tables and/or Figures are submitted in image format (JPEG, PDF, etc.), an editable format must also be submitted along with a text description of the information depicted in the Table/Figure. This will be provided as alt format in the electronic version of JPED, making Tables/Figures accessible for screen readers.

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- Body of Email: Include a statement that you are submitting a manuscript for consideration for the JPED. Include the title of the manuscript and your full contact information.
- Attach to the email:
  - Your complete manuscript, prepared as directed above.
  - Cover letter as outlined above.

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For manuscripts that are accepted for publication, Valerie Spears (JPED Editorial Assistant) will contact the lead author to request:

- A 40-50 word bibliographic description for each author, and a signed copyright transfer form (Valerie will send templates for both).
- Manuscript submissions by AHEAD members are especially welcome. The JPED reserves the right to edit all material for space and style. Authors will be notified of changes.
Practice Brief Manuscripts

JPED invites practitioners and/or researchers to submit Practice Briefs that can inform readers of innovative practices that could, in time, become the basis of an empirical study. Practice Briefs will describe new or expanded programs, services, or practices that support postsecondary students with disabilities. Practice Briefs are not research articles. Manuscripts that involve data analysis beyond the reporting of basic demographic data or evaluative feedback should be submitted as research articles. The overall length of a Practice Brief will be limited to 12 double-spaced pages, which includes separate title page, abstract, and references pages. Tables and/or figures may be submitted, too, above and beyond the 12 page limit.

Please submit all components of a Practice Brief (i.e., cover page, abstract, body, appendices) as a single Word document. These manuscripts should use the following headers/sections:

- **Title Page:** Title not to exceed 12 words. Identify each author and his/her campus or agency affiliation. State in your email cover note that the work has not been published elsewhere and that it is not currently under review by another publication.
- **Abstract:** The abstract needs to answer this question: “What is this paper about and why is it important?” The abstract should not exceed 150 words.
- **Summary of Relevant Literature:** Provide a succinct summary of the most relevant literature that provides a clear context for what is already known about your practice/program. If possible, describe similar practices on other campuses. Priority should be given to current literature published within the past 10 years unless an older, seminal source is still the best treatment of a particular topic/finding.
- **Depiction of the Problem:** In addition to a clear statement of the problem being addressed, consider the following questions when stating the purpose of the article: What outcome, trend, or problem might improve if your practice/program works? What gaps or problems or issues might persist or arise if this practice/program did not exist?
- **Participant Demographics and Institutional Partners/Resources:** Maintain the anonymity of the students, colleagues, and campus(es) discussed in the article but provide a clear demographic description of participants (e.g., number of students, disability type, gender, race and/or ethnicity whenever possible, age range if relevant) and the types of offices or agencies that were collaborative partners (if relevant).
- **Description of Practice:** Briefly and clearly describe your innovative practice/program and how it has been implemented to date. Tables and figures are encouraged to provide specific details you are comfortable sharing. They condense information and enhance replication of your practice/program on other campuses.
- **Evaluation of observed outcomes:** Whenever possible, summarize formative or summative data you have collected to evaluate the efficacy of your practice/program. This can be anecdotal, qualitative, and/or quantitative data. Support any claims or conclusions you state (e.g., “Our program greatly enhanced students’ ability to self-advocate during their transition to college”) with objective facts and/or behavioral observations to support these claims.
- **Implications and Portability:** Discuss what you have learned thus far and how you could further develop this practice/program in the future. Be honest about any challenges you may have encountered. This transparency enhances the rigor of your reporting. What would you do differently next time to achieve stronger outcomes? Provide a clear description of how and why disability service providers on other campuses should consider adapting your practice/program. Finally, how could your practice be studied by researchers? Identify possible research questions, hypotheses, or potential outcomes that could be studied if you and/or colleagues could expand the practice/program into a research investigation.
- **References:** Use the current APA guidelines to format and proofread your paper prior to submitting it. This includes the proper use of spelling, punctuation and grammar, appropriate use of headers, correct formatting in listing references, and formatting any tables or figures appropriately.

Upon Acceptance for Publication

For Practice Briefs that are accepted for publication, Valerie Spears (JPED Editorial Assistant) will contact the lead author to request:
• A 40-50 word bibliographic description for each author, and a signed copyright transfer form (Valerie will send templates for both).
• Manuscript submissions by AHEAD members are especially welcome. The JPED reserves the right to edit all material for space and style. Authors will be notified of changes.

Guidelines for Special Issues

JPED publishes one special issue per year (normally Issue 3, published in the fall). Special issues feature a series of articles on a particular topic. JPED welcomes ideas for special topical issues related to the field of postsecondary education and disability. The issue can be formatted as a collection of articles related to a particular topic or as a central position paper followed by a series of commentaries (a modified point/counter point). Authors who wish to prepare a special issue should first contact the JPED Executive Editor at jped@ahead.org.

The authors should describe the topic and proposed authors. If the series appears to be valuable to the readership of the JPED, the Executive Editor will share an Agreement Form to be completed and returned by the Guest Editor. The Executive Editor may provide suggestions for modification to content or format. The Guest Editor will inform authors of due dates and coordinate all communications with the contributing authors. Each special edition manuscript will be reviewed by members of the JPED editorial board members. The Guest Editor and the Executive Editor will be responsible for final editing decisions about accepted manuscripts.

Book Review Column Guidelines & Procedures

Please contact the JPED Executive Editor at jped@ahead.org to suggest books to be reviewed or to discuss completing a book review. Contact and discussion should be done before the book review is completed in order to expedite the procedures in the most efficient and fairest way possible.

Content and Format

In general, the book review should present:

• An overview of the book, providing the book’s stated purpose, the author’s viewpoint, and a general summary of the content.
• An evaluation of the book, elaborating on the author’s objectives and how well those objectives were achieved, the strengths and weaknesses of the book along with the criteria you used for making that assessment, and the organization and presentation of the book. Recommendations should specify to whom you would recommend the book, why, and how you would suggest the book be used, and address its potential contribution to our field.
• Citations within the book review should follow the current edition of the American Psychological Association (APA) style manual.

At the end of the review, please list your name and institutional affiliation.

Submission

The length of a book review can range from 800-1200 words. Please send in an email attachment in MS Word, double-spaced to jped@ahead.org per instructions above in “How to Submit Manuscripts.” After the review is submitted, the Executive Editor or designee will edit the manuscript and follow up with you about the publication process.

Publication Statistics

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