

A Survey of Postsecondary Education Programs for Students With Intellectual Disabilities in the United States

Meg Grigal, Debra Hart, and Cate Weir

Institute for Community Inclusion, University of Massachusetts Boston, Boston, MA, USA

Abstract The authors present findings from a 2009 survey of postsecondary education (PSE) programs for students with an intellectual disability (ID) conducted in the United States. The survey was designed to collect descriptive information on characteristics and practices of existing PSE programs for students with an ID. The survey consisted of 63 items organized into 10 sections including: institution or program characteristics, dual enrollment characteristics, referral and application process, college course access and supports, employment, residential options and campus access, family support, student outcomes, challenges, and program contact information. Some 149 programs in institutions of higher education in 39 states indicated that they served students with ID. PSE program characteristics included basic characteristics, recruitment and admission, course access, campus activities, accommodations, funding, collaboration, employment, and residential services. The results of the survey show that for students with an ID, the college experience differs in a number of important ways from the experiences of their peers without an ID. The high degree of variability among programs responding to the survey suggests that the experiences of students with ID differ from one program to another as well. The authors note that their findings can be used to describe current practice as well as to serve as a baseline of practice that will be important to reference as the field evolves.

Keywords: intellectual disabilities, national survey, postsecondary education, program characteristics

INTRODUCTION

Leonhardt (2011) noted that “Sending more young Americans to college is not a panacea; not sending them to college would be a disaster.” A recent *New York Times* article, titled “Even for cashiers, college pays off,” highlights the importance of a college experience for everyone, even in fields where a degree is not required. Participation in college provides opportunities to learn skills such as problem solving, communication, discipline, and persistence that are critical to future employment and being a valued member of one’s community (Leonhardt, 2011; Long, 2011). Simply put, higher education helps individuals secure better jobs earning higher wages (Leonhardt, 2011; Long, 2011; Schultz & Higbee, 2007). Almost two-thirds of all jobs require

skills associated with at least some education beyond high school (Carnevale & Desrochers, 2003).

Over the last decade, the United States has seen growth in the number of postsecondary education (PSE) options for students with disabilities,¹ including students with an intellectual disability (ID) (Grigal & Hart, 2010; Newman, Wagner, Cameto, Knokey, & Shaver, 2010; Raue & Lewis, 2011; Snyder & Dillow, 2010). A 2010 National Center for Education Statistics survey of Title IV 2-year and 4-year institutions of higher education found that 3,680 (88%) indicated enrollment of students with disabilities. Institutions of higher education reported enrolling 707,000 students with disabilities in the 2008–09 academic year, with students equally enrolled in public 2-year and 4-year settings. Eighty-six percent of institutions of higher education reported enrolling students with learning disabilities, followed by those with attention deficit disorder (79%), then students with mobility challenges (76%) or mental illness/psychological conditions (76%) (Raue & Lewis, 2011). Forty-one percent of the institutions of higher education also indicated that they enrolled students with “cognitive difficulties or intellectual disability” at a much lower frequency (Raue & Lewis, 2011).

Received November 9, 2011; accepted September 29, 2012
Correspondence: Meg Grigal, PhD, Institute for Community Inclusion, University of Massachusetts Boston, 100 Morrissey Blvd, Boston, MA 02125, USA. Tel: +1 410-419-4345; Fax: +1 617-287-4352; E-mail: meg.grigal@umb.edu

Note: This publication was supported by a grant (CFDA# H133A80042) from the National Institute on Disability and Rehabilitation Research (NIDRR). Grantees undertaking projects under government sponsorship are encouraged to express freely their findings and conclusions. Points of view or opinions do not, therefore, necessarily represent official NIDRR policy.

¹The term disabilities as used generically in this paper refers to students with a range of disabilities including learning disabilities, traumatic brain injury, speech and language disorders, orthopedic disabilities, deaf-blind, autism, deafness, mental illness, hearing impairment, and intellectual disability.

Colleges and universities in the United States as well as in other parts of the world have been serving students with ID for close to 30 years (Neubert, Moon, Grigal, & Redd, 2001; Uditsky & Hughson, 2012). The existing research on PSE for students with an ID provides descriptions of the characteristics, activities, and outcomes of students in PSE programs at the state level (Grigal et al., 2001; Neubert, Moon, & Grigal, 2004) and to a lesser extent at a national level (Gaumer, Morningstar, & Clark, 2004; Hart & Grigal, 2008; Hart, Mele-McCarthy, Pasternack, Zimbrich, & Parker, 2004; Papay & Bambara, 2011; Zafft, Hart, & Zimbrich, 2004). Programs are described in terms of the profile of students served and the level to which they provide access to integrated academic- and campus-wide experiences for students with an ID.

A variety of terms have been used to describe the PSE services and the students with an ID who receive them. One distinction is based upon the students' status as recipients of special education services. In the United States, most students with an ID are able to receive federally mandated special education services under the Individuals with Disabilities Education Act (IDEA) until they are 22 years old. Hart, Zimbrich, and Parker (2005) first used the term "dual enrollment" to refer to the practice of supporting students with an ID between the ages of 18–22 to receive their final years of mandated transition services on a college campus and, in some cases, attend college classes. Students in dual enrollment programs are still enrolled in the K-12 education system and receiving services as mandated under IDEA. Gaumer et al. (2004) refer to these PSE programs as "community-based transition programs" (CBT programs), and include programs not based on a college campus.

However, there are also PSE programs that serve individuals with ID who are *not* enrolled in K-12 education. These programs may be referred to as "adult" programs as they serve students with ID 18 years and older. These adult PSE programs are also provided on a college campus and may or may not provide access to college courses. Other terms that have been used to describe programs and services include "substantially separate programs," "mixed programs," and "inclusive individualized services" (Hart et al., 2004; Neubert, Moon, & Grigal, 2002; Stodden & Whelley, 2004).

Previous efforts to garner information about existing PSE programs in the United States for people with an ID have varied in scope and focus. Gaumer et al. (2004) established a national database of CBT programs that is available at the University of Kansas's Transition Coalition website (<http://www.transitioncoalition.org>). The researchers identified 101 programs in 29 states, including 48 at postsecondary institutions, 27 at business locations, 13 at apartments or houses, and 13 non-site-based or individual support models. Overall, the database focuses on CBT programs for students ages 18–21; therefore, it includes programs that served students in that age range in varying locations, including, but not limited to PSE settings.

In 2004, the Institute for Community Inclusion (ICI) gathered data to facilitate the creation of a database of PSE options for students of all ages with ID. Thus, respondents included PSE programs that served dually enrolled students, as well as PSE programs that served people with ID that were no longer receiving education and transition services under the IDEA. However, this effort focused on programs that served students with ID

only in PSE settings. Seventy-five respondents participated in a telephone survey designed to collect basic information about services and supports, length of program operation, funding, and students served (Zafft, Hart, & Zimbrich, 2004). The researchers used the level of college course access for students with an ID as the unit of analysis for describing these programs. These survey results indicated that existing programs could be described as one of the following three models: mixed/hybrid, substantially separate, or inclusive individualized support (Hart et al., 2004). The *mixed model* is a program in which students participate in social activities and/or academic classes with students *without* ID (for audit or credit) and also participate in classes with other students *with* disabilities (sometimes referred to as "life skills" or "transition" classes). The *substantially separate model* is a program in which students with ID receive services in a postsecondary setting, but participate *only* in classes with other students *with* disabilities. The *inclusive individual support model* is a program in which students receive individualized services (e.g., educational coach, tutor, technology, peer mentors, natural supports) in order to access college courses, certificate programs, and/or degree programs, for audit or credit. The inclusive individual support model is based on a supported education approach that was originally designed for use with individuals who had mental health challenges and who needed more intensive wrap-around supports. There is no program base on campus. Results also showed a great degree of variability among the existing programs.

Hart et al. (2004) documented that the majority of the programs that responded to the survey in the United States offered a hybrid/mixed option, followed by substantially separate model, with only a small percentage of the models offering the inclusive individual support model. Survey results were compiled into an online searchable database. Additional PSE programs were added after the survey efforts ended, as programs were allowed to request that they be added to the database through an online form. In 2008, there were 148 programs in the ICI PSE programs database.

In 2008, Papay and Bambara conducted a survey of 52 dual enrollment (college-based transition programs) in the United States for students with intellectual and developmental disabilities ages 18–21. These researchers sought to gather information on these dual enrollment programs and the opportunities they provide to students with an ID. Papay and Bambara (2011) found that most programs were operated by school districts and served a small number of students. The purpose of most programs focused on employment, inclusion with same-age peers, independent living skills, and participation in college classes. Program enrollment was larger in substantially separate and mixed/hybrid programs than in individualized inclusive programs. Fewer than a quarter of all students in programs surveyed were reported to be taking college classes. The majority of classes taken for credit were vocational and remedial classes; the majority of those taken informally or audited were academic, health and fitness, and arts classes. At 2-year and community colleges, more classes were reported to be taken for credit, whereas at 4-year colleges, more classes were reported to be taken informally (Papay & Bambara, 2011).

Expanding on these previous efforts, in 2009, the National Institute on Disability and Rehabilitation Research funded the

National Center for Postsecondary Education for People with Intellectual Disabilities at the ICI at the University of Massachusetts at Boston. This center was charged with conducting a survey of PSE programs in the United States to identify existing PSE options for students with ID.

Specific Aims

The survey was designed to collect descriptive information from institutions of higher education on the characteristics and practices of existing PSE programs for students with an ID. The survey was conducted between April 30, 2009, and December 8, 2009. It was designed to answer the following questions:

1. What are the characteristics of PSE programs and how do PSE programs vary in models and approaches?
2. How are students recruited and what are the admission criteria?
3. What supports and accommodations do the PSE programs make available to students with an ID?
4. To what extent are students with an ID participating in academic courses and campus-wide activities with peers without disabilities?
5. How are PSE programs funded?
6. To what degree are PSE programs collaborating with the host institutions of higher education and across K-12 and adult service systems?
7. To what extent are students with ID involved with paid and unpaid employment activities, what are the locations of these employment activities, and the types of employment supports that are provided while attending the PSE program?

Definitions

For the purpose of this study, a PSE setting was defined as a 2-year or 4-year institution of higher education or a vocational/adult education institution. The definition of ID used in this study was that of the American Association on Intellectual and Developmental Disabilities (AAIDD; 2007): *Intellectual disability is a disability originating prior to the age of 18 and is characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills.* ID is the preferred term for the disability historically referred to as “mental retardation.”

METHODS

Instrument Development

The survey was designed to collect information on programs or individual services for students with ID at American institutions of higher education in order to accurately describe the current status of postsecondary educational opportunities available to individuals with ID. The information would also be used to create a searchable online database of available PSE options.

A descriptive cross-sectional survey tool was designed based upon work conducted by Hart et al. (2004). Project team members at the ICI conducted an iterative process of item development that drew from existing field-tested tools. Project team members also developed new items when needed.

Key stakeholder groups, including the members of advisory and executive committees of the National Center for Postsecondary Education for People with Intellectual Disabilities, reviewed the draft tool. These committees were composed of university and professional organization partners, college and university faculty and staff, PSE program staff, parents, college students with an ID, and K-12 educators. After incorporating feedback from the advisory and executive committees, the survey was piloted with eight PSE programs (2-year and 4-year colleges/universities). Pilot sites provided feedback on function and content that was addressed in the final version of the tool. The final version of the survey consisted of 63 items organized into 10 sections including: institution or program characteristics, dual enrollment characteristics, referral and application process, college course access and supports, employment, residential options and campus access, family support, student outcomes, challenges, and program contact information.

Comprehensive Search for Existing Programs

There is no central repository in the United States that lists higher education programs that serve students with ID. The primary source for data on colleges, universities, and technical and vocational postsecondary institutions in the country is the Integrated Postsecondary Education Data System; however, it does not reflect any variables or program characteristics related to serving students with an ID. An extensive outreach effort was implemented to ensure that the maximum number of possible sites that provided PSE for students with an ID were included in the survey.

Existing information The existing ICI PSE programs database was added to the list of programs to be surveyed. This program database was based on a telephone survey conducted in 2004 ($n = 75$). Additional programs were added as they submitted information to the ICI, resulting in a database of 148 programs at the time of this survey.

Partner outreach efforts Substantial outreach efforts were employed by national partner organizations to enhance the pool of respondents. These organizations included the Association of Higher Education and Disability, American Association of Colleges of Teacher Education, Association of University Centers of Excellence in Disability, National Down Syndrome Society, Consortium for Postsecondary Education for Students with Intellectual Disabilities, Healthy and Ready to Work, Council for Exceptional Children's Division on Career Development and Transition, National Secondary Transition Technical Assistance Center, and the PACER Center. Each of these organizations posted information about the survey effort on their websites and distributed information to their constituencies and members.

Project outreach efforts The project also used a number of dissemination strategies to alert the field that the center was

embarking on a national survey. Information was posted on the project's website, via its social media outlets, and in a project newsletter. Survey information was also distributed to participants during face-to-face training events, such as capacity-building institutes and national meetings (e.g., TASH, Council on Exceptional Children, AAIDD, Division of Career Development and Transition).

These outreach efforts resulted in a list of 362 potential PSE programs. This list was reviewed to eliminate duplicates and identify any programs that did not meet the research guidelines. To be included in this survey, programs must have provided postsecondary academic opportunities on a college campus to students who met the definition of ID. Any program that clearly did not meet these criteria was eliminated from the survey sample. After duplicate records and ineligible programs were removed, 244 unique programs that appeared to meet all relevant criteria remained.

Survey Distribution and Response Rate

An online survey was created, and a unique link was sent to the e-mail address associated with the 244 identified programs. The e-mail containing the link also outlined the intent of the survey and provided a contact for questions. To increase response rate, project staff sent e-mail reminders and conducted phone calls to facilitate survey completion. Completed surveys were received from 158 programs from 39 states, for a response rate of 67%. Of these 158 responses, 9 (6%) indicated that they did not serve students with ID, and were therefore not included in the findings.

FINDINGS

Respondents from 149 programs in institutions of higher education in 39 states indicated that they served students with ID. Not every respondent answered every question; therefore, we will provide the number of respondents for each primary finding shared in the following.

Basic Program Characteristics

Four-year colleges or universities accounted for slightly over half of the programs (51%), followed by 2-year colleges (40%), with trade/technical schools accounting for the smallest percentage of respondents (10%) ($n = 135$). Forty-five percent of respondents indicated that their college program served adult students with an ID (i.e., students 18 years or older who are no longer receiving special education/transition services under IDEA) on their campus, 26% of respondents served dually enrolled students (i.e., students between the ages of 18–22 who continue to receive special education services under IDEA) on their campus, and 29% served both groups ($n = 118$). Responding programs indicated a wide range of how long they had been in existence, ranging from 5 months to 35 years ($n = 149$). When asked to choose the primary focus of their PSE program, 34% selected independent living/life skills, 32% selected

employment, 18% selected college course access, 12% selected self-determination, and 3% selected social skills ($n = 91$).

The national distribution of PSE options for students with ID corresponds with areas that have higher numbers of colleges. With the exception of one state (Illinois), the states that had the largest number of responding institutions of higher education were on the east and west coast, including New York ($n = 17$), California ($n = 14$), Maryland ($n = 14$), Illinois, ($n = 11$), and Massachusetts ($n = 8$). Most states had three or fewer responding institutions of higher education. There were 11 states that had no respondents; however, this does not necessarily mean that there are no programs that serve students with an ID in these states, only that no program in these states responded to the survey.

Recruitment and Admissions

Respondents indicated that students were referred to the PSE program primarily via local education agencies (LEAs) (50%), direct requests from families (48%), and direct requests from students (34%). Referrals from agencies such as vocational rehabilitation (VR) and developmental disability agencies were less frequent (30%) ($n = 149$). Seventy-one percent of respondents indicated that students with an ID were not required to take placement tests. Twenty-five percent indicated that students with an ID did take placement tests ($n = 132$).

When asked about the use of special entrance criteria for students with ID, respondents indicated that the following criteria were considered: ability to follow code of conduct (66%), specialized entrance criteria (56%), level of safety skills (50%), independent navigation of campus (40%), certificate of attendance from high school (35%), and record of immunizations (28%). Other criteria included specific disability label/type (24%), IQ (23%), and high school diploma (22%). Twenty-three percent of respondents indicated that entrance criteria for students with an ID were the same as for other applicants to the college. Sixty percent of respondents indicated that students with an ID were formally enrolled in the college ($n = 143$). Eighty percent indicated that they provided all or most students with assistance with course registration ($n = 116$). Fifty-three percent of the respondents indicated that students with an ID accessed courses using the typical registration process ($n = 130$). Almost half (47%) of the respondents indicated that students received academic advising from college faculty or staff in the same manner as other students ($n = 130$).

Course Access, Campus Activities, and Accommodations

When asked about participation in various types of instruction, the majority of respondents (62%) indicated that they offered social skills training, followed by independent living and life skills instruction (61%). Access to noncredit college classes was offered by 57% of respondents, and access to credit-bearing college courses by 51%. Seventy-five percent of respondents affirmed that students with an ID in their program participated in group instruction or activities only with other students with an ID. Forty-five percent of respondents indicated that 76% to 100% of the instruction students received in their program was

provided only with other students with ID ($n = 98$). Figure 1 details the percentage of instruction provided only with other students with an ID. Each pie segment indicates percent of respondents reporting the extent of instruction provided only with other students with an ID.

Fifty-eight percent of programs indicated that students with an ID received services from the college or university's disability services office (DSO), and 39% indicated that students did not, with 3% of respondents indicating that they did not know if students received services from the DSO ($n = 128$). Although a majority of respondents (88%) indicated that students with an ID requested accommodations from their instructors, only

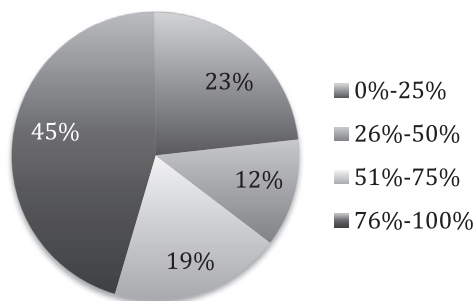


FIGURE 1
Percent of respondents reporting that instruction was provided only with other students with intellectual disability.

14% indicated that students did so independently. Seventy-four percent of respondents indicated that students requested accommodations with guidance or assistance ($n = 126$). Twelve percent of respondents indicated that students did not request accommodations ($n = 126$). Respondents indicated that a wide range of accommodations were available to students with an ID. Figure 2 details the types of accommodations that were available to students. Table 1 details the types of academic related supports in and out of the classroom that the students received.

Funding

A variety of funding options were reported by the respondents, with a majority reporting two or more sources to fund tuition and services for students. The most common funding option was private payment (61%), while funds from LEAs, VR agencies, and scholarships were also cited frequently (30%). There was also usage of other funding such as funds from local developmental disabilities provider agencies (23%), financial aid (Pell grants, student loans) (21%), state developmental disabilities agencies (16%), VR or Social Security Administration tuition waivers (15%), federal/state grants (15%), foundation/private grants (13%), and Medicaid waivers (11%).

Collaboration

Overall, respondents indicated a high degree of collaboration between their institutions of higher education and other agencies or organizations (LEAs and adult developmental dis-

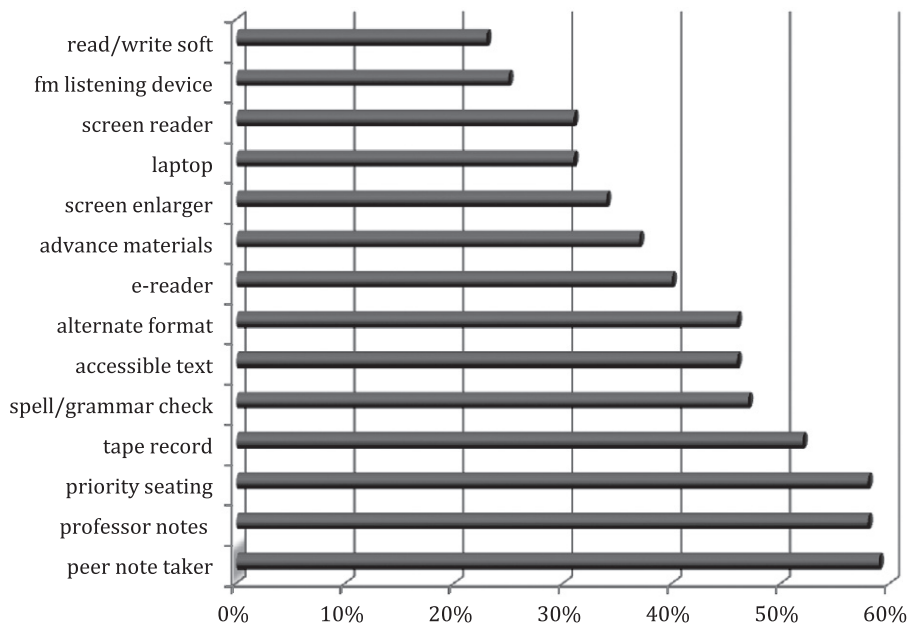


FIGURE 2
Available accommodations.

TABLE 1
Types of academic related supports (*n* = 116)

| Type of support | None (%) | Some (%) | Most (%) | All (%) |
|--|----------|----------|----------|---------|
| One-on-one in class coaching (<i>n</i> = 116) | 37 | 30 | 13 | 20 |
| Out of class tutoring (<i>n</i> = 115) | 10 | 41 | 13 | 36 |

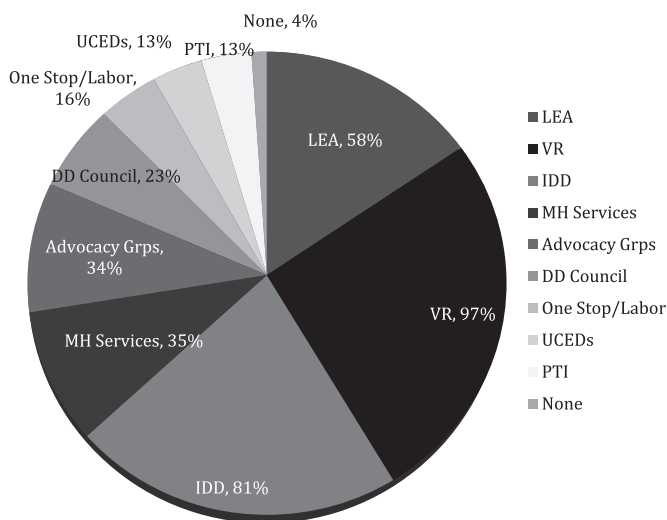


FIGURE 3
Institute of higher education collaborations.
LEA, local education agency; VR, vocational rehabilitation; IDD, intellectual and developmental disabilities; MH Services, mental health services; DD Council, developmental disabilities planning council; UCEDs, University Centers of Excellence in Disabilities; PTI, parent training and information office.

abilities services agencies). Only 4% (*n* = 149) of the responding institutions of higher education indicated that they did not collaborate with any other agency or organization. Figure 3 details collaboration with outside agencies and organizations.

Employment

A majority of the respondents (81%, *n* = 129) indicated that their program addressed employment training or career preparation for students with an ID. Respondents also indicated that students with an ID received varying levels of employment support, including job shadowing, situational assessment, person-centered planning, job development and placement services, job coaching, transportation, and natural supports.

TABLE 2
Type and location of paid work

| Type and location of paid work | None (%) | Some (%) | Most (%) | All (%) |
|---|----------|----------|----------|---------|
| Individual job in the community (<i>n</i> = 100) | 18 | 57 | 24 | 1 |
| Individual job on campus (<i>n</i> = 96) | 57 | 39 | 3 | 1 |
| Group/crew job in the community (<i>n</i> = 93) | 85 | 13 | 2 | 1 |
| Group/crew job on campus (<i>n</i> = 93%) | 93 | 6 | 1 | 1 |

TABLE 3
Type and location of unpaid work

| Type and location of unpaid work | None (%) | Some (%) | Most (%) | All (%) |
|---|----------|----------|----------|---------|
| Community-based internships (<i>n</i> = 98) | 15 | 48 | 21 | 15 |
| Campus-based internships (<i>n</i> = 93) | 34 | 37 | 14 | 15 |
| Individual work training sites (<i>n</i> = 95) | 43 | 37 | 9 | 11 |
| Individual work training sites paid by stipend below minimum wage (<i>n</i> = 93%) | 77 | 17 | 2 | 3 |
| Group work training sites paid by stipend below minimum wage (<i>n</i> = 93%) | 94 | 5 | 1 | 0 |

Responses reflected a great deal of variability in the provision of these services and the kind of staff who provided them. Tables 2–4 reflect the frequency of various on-campus and community-based paid and unpaid employment settings and the type of employment related supports.

Residential Services

When asked if students with an ID were provided an opportunity to live on campus or in another setting away from family, 33% of the respondents indicated that they did not provide residential services to any students, including those with an ID. Thirty-nine percent indicated that they did provide access to residential services for students with an ID, and 28% indicated that they did provide residential access to students but did not provide it to students with an ID (*n* = 123). The kinds of

TABLE 4
Type of employment related supports

| Type of support | None (%) | Some (%) | Most (%) | All (%) |
|--|----------|----------|----------|---------|
| Job development and placement services (<i>n</i> = 94) | 7 | 30 | 18 | 45 |
| Job coaching (<i>n</i> = 94) | 6 | 36 | 22 | 35 |
| Personal aides (<i>n</i> = 91) | 46 | 44 | 4 | 5 |

residential setting available to students with an ID included dorms (19%), on-campus apartments (10%), off-campus apartments (19%), fraternity/sorority houses (3%), and a special section of a dorm or other housing exclusively for students with ID (4%) (*n* = 83). Respondents indicated that the following services were provided to students with an ID that were not typically provided to students residing on campus: independent living skills training, 24-h staff support, and paid roommates.

Limitations

While this survey sheds some light on the PSE landscape for people with ID, these findings should be interpreted with caution. These data represent only the programs that responded to the national survey (*n* = 149); therefore, the data may not be representative of all existing PSE program serving students with an ID in the United States. There has been no tracking of the people with ID in the United States who have accessed local opportunities that are not part of a dedicated program (e.g., classes at a local college). As a result, there are numerous individuals with an ID attending colleges whose experiences are not reflected in this study.

In addition to sampling limitations, the respondents from each PSE program varied in their role in the program. Some respondents were employed at an institution of higher education, while others were employed by an affiliate school system, and the level of knowledge of program services may have been impacted by the role of the respondents. Although thorough descriptions or definitions of each variable were provided, it is likely that some respondents interpreted items differently from the way they were intended. The information provided by respondents was self-reported data via an online survey and thus is vulnerable to misinterpretation or other inaccuracies. Comparisons are also somewhat difficult to draw from the survey results, because although 149 responses were received, each respondent did not answer every question.

Finally, while the definition of ID as used by the AAIDD was provided to all survey recipients, it is possible that respondents failed to review that definition or apply it consistently when describing their programs and services. Thus some survey responses may have reflected programs and services for individuals who had other disabilities.

DISCUSSION

The results of the survey show that for students with an ID the college experience differs in a number of important ways from the experiences of their peers without an ID. The high degree of variability among PSE programs responding to the survey suggests that the experiences of students with ID differ from one program to another as well.

Program Characteristics

An overarching finding from the survey is a significant level of variability in respondent programs. Alignment with the institutions of higher education practices for students without an ID, level of inclusion of students with an ID in typical college classes, types of academic opportunities provided, focus of the program, and funding approaches all varied widely. Note that these findings reflect programs implemented prior to the passage of the Higher Education Opportunity Act (HEOA; 2008). This legislation offered the first federal guidance related to the provision of higher education services for people with an ID by creating and defining the comprehensive transition and postsecondary program for students with an ID. It also funded 27 model demonstration projects, referred to as Transition Postsecondary Education Programs for Students with an ID (TPSIDs) and a National Coordinating Center. Before the guidance and funding provided by the HEOA, programs tended to be established based on the philosophy and needs of a local entity, rather than on any generally accepted definition or approach. Under these circumstances, variability in approach among respondents to this survey is to be expected.

Program Focus

When asked to choose the primary focus of their program, respondents selected the category of independent living/life skills most frequently (34%). Employment was the next most frequent response (32%), while only 18% of the institutions of higher education reported that academic course access was the program's primary goal. These results bring to light the fundamental difference in experience that students with an ID have when attending college. For college students without an ID (or with a non-learning impairment-based disability), academics would most likely be seen as the primary focus of college attendance. But for students with an ID, independent living and life skills and employment were both rated as the primary goal at twice the frequency.

Papay and Bambara (2011) found a similar focus on employment and independent living. A large majority of their respondents indicated that the purpose of students with an ID being on a college campus was to have better access to employment opportunities and the chance to improve their independent living skills. The only programs that universally stated that the purpose of their program was course access were those who categorized themselves as using the inclusive individual support model.

Referral and Admissions

LEAs comprised the largest referral source for PSE programs. This could be due in part to the rise in dual enrollment programs being implemented by LEAs in conjunction with colleges and universities to provide transition services to youth with an ID (Grigal, Dwyre, Emmett, & Emmett, 2012; Kleinert, Jones, Sheppard-Jones, Harp, & Harrison, 2012; Papay & Bambara, 2011). Direct requests from parents were also a frequently cited referral source. This is not surprising as more parents are indicating that college is part of their child's future goals (Martinez, Conroy, & Cerreto, 2012). There were low numbers of referrals reported from state agencies, such as the VR and developmental disabilities agencies, although it is likely that collaboration with VR agencies will begin to grow. This has already been noted by the National Coordinating Center for TPSID programs which identified that a large percentage of TPSIDs collaborate with their states' VR and developmental disabilities agencies (Grigal, Hart, & Weir, 2011).

More VR agencies have begun to recognize PSE as a path to employment for students with ID (Thacker & Sheppard-Jones, 2011). The Think College network has identified a number of states (e.g., Florida, Hawaii, Ohio, California, South Carolina) in which VR agencies have engaged in creative partnerships to fund PSE services for people with ID. Additional support for VR involvement in PSE for youth with an ID was provided in 2011, in a letter responding to a query from the Florida Department of Education about appropriate use of VR funds for transition-aged youth.

The then-Rehabilitation Services Administration Commissioner indicated that VR funds could be expended to support transition-age students in PSE programs to support vocational services including: tuition, books, supplies, on-the-job training, placement, and support services. The commissioner's letter² stated that the fact that an individual eligible for VR was receiving transition services under an individualized education plan (IEP) did not preclude the state VR agency from providing services through the development of an individual plan for employment.

Some institutions of higher education indicated the use of admission criteria that extended beyond typical requirements, such as safety skills, behavioral expectations, and disability type. Papay and Bambara also found that the programs they surveyed used some atypical admissions requirements. Some of these were associated with "dual enrollment," such as enrollment in a certain school district, completion of a specified number of years of high school, or being of a specified age. They reported that the majority of mixed and separate programs excluded students who exhibited challenging behavior, and at least a third of these programs also excluded students who lacked safety skills.

Disability type may soon become a more prevalent entrance criteria into PSE programs. Since these data were collected, new Title IV programs³ have been created (i.e., comprehensive transition programs (CTPs)) that are allowed to offer eligible students with an ID access to certain kinds of non-loan-based federal

student aid (Lee & Will, 2010). However, access to this aid is only available to students with a documented ID. As more institutions of higher education seek approval to become CTPs, it is possible that documenting an ID may become as commonplace as documenting a disability and self-identifying at a college DSO. The approved CTPs can serve students without an ID, but only those who meet the federal definition of an ID are eligible for federal student aid when accepted into an approved program.

Course Access, Campus Activities, and Accommodations

Survey responses showed that half of the programs provided access to courses via the typical registration process and that students with an ID received academic advising from college faculty or staff in the same manner as other students. This demonstrates a positive trend toward aligning the services of PSE programs with the existing structures and processes used in college by all students. Aligning services with college systems and practices has been identified as one of eight standards of practice in the Think College Standards for Inclusive Higher Education (Grigal, Hart, & Weir, 2012). Alignment with typical processes allows students with an ID to participate more fully in campus life, an important factor when the aim is to provide an authentic, inclusive college education experience.

While this trend is encouraging, a large number of PSE programs continue to create separate structures for course registration and academic advising. Half of the respondents reported that students with an ID did not access academic and disability-related advising through the typical college process, instead receiving specialized services offered by program staff. Further, while all of the students in these programs have disabilities, only slightly more than half of them received any services from the college's DSO. This issue may have less to do with the type of disability than it might initially appear. To receive accommodations from a college or university's DSO, students have to voluntarily identify themselves to the office as having a documented disability. Therefore, it is incumbent upon the student to take action. Students with other disabilities have also been found to underutilize the services provided by the DSO (Newman et al., 2011), as they are reluctant to be viewed at the college as having a disability. As a result, only a small percentage of students who had been identified as having a disability in secondary school sought and received accommodations via the college's DSO. A similar pattern of behavior may be occurring with students with ID.

Survey results indicated that access to courses, including credit and noncredit college classes, was offered by a slight majority of responding institutions of higher education. However, many programs stated that "some" or "most" of their students had access, but fewer stated that "all" students had access. Papay and Bambara (2011) found that fewer than one-quarter of students enrolled in the surveyed PSE programs were taking college classes. These percentages were higher in inclusive individualized programs than in those that used a mixed or substantially separate approach. Three quarters of respondents also affirmed that students with an ID participated in group instruction or activities only with other students with an ID.

²Lynnae Rutledge, personal communication, March 21, 2011.

³Title IV programs are those programs authorized under Title IV of the Higher Education Act that are the major source of federal student aid.

This issue of separate classes, instruction, and experiences seems to be a defining element of program design (Grigal & Hart, 2010; Katovich, 2010). While access to classes may depend upon the program location and perceived academic ability of the student (Papay & Bambara, 2011), it may also depend to a great extent on the emphasis that those implementing the program place on such access. Attitudinal barriers continue to exist toward people with ID accessing higher education, both within secondary transition and PSE programs (Grigal & Hart, 2010). These barriers are predicated on the assumption that people with an ID are not cognitively suited to higher education. These pervasive low expectations for youth with an ID have been documented (Grigal, Hart, & Migliore, 2011; Papay, 2011). The decision to support students with an ID to access existing college courses is often in the hands of the program developers, and likely reflects their level of expectation for the youth who will attend their program.

The percentage of students with an ID participating in inclusive college courses may increase in the future due to the requirements of the HEOA. In its guidance on CTPs, the HEOA mandates that a minimum of 50% of program time must be composed of access to academic courses populated by students without an ID.

Funding

Survey respondents identified funding as the top challenge to offering access to PSE for students with an ID. A wide variety of funding options and strategies were reported, indicating a braided approach that took advantage of funding available to students with an ID to support employment preparation and independent living instruction. Examples of funding sources included VR, Medicaid, and adult developmental disabilities services funding. While public sources of funding were used to varying degrees, 61% of the respondents depended on student and family funds to pay for the cost of attendance. Families and students with an ID need to know that while the option to attend college is becoming more available, there is likely to be some cost to them to attend.

CTPs provide a new access point for federal financial aid for students with an ID. These programs are specifically designed to serve students with an ID and must include access to inclusive course options, person-centered planning, and also provide an advising structure to be deemed approved programs by Federal Student Aid. Once approved, these CTPs can offer Pell grants, Supplemental Educational Opportunity grants, and work-study funds (but not student loans) to enrolled and eligible students with an ID. However, 2 years after these programs were sanctioned, the number of CTPs in 2012 was a mere 14, or 0.002% of the 6,632 PSE institutions that exist in the United States. These opportunities for students with an ID to access federal financial aid are promising. However, unless students with an ID are attending an approved CTP, they are not eligible for federal grants or work-study funds, and they are not able to access student loans regardless of the type of programs they are attending.

Unfortunately, use of other more traditional systems to fund higher education, such as "529 plans" (i.e., tax-advantaged savings plans designed to encourage saving for future college

costs), is also difficult. Currently, there is no written guidance from the Department of Education or Department of Treasury on the use of the 529 plans for college students with an ID. There is a page on the federal student aid website dedicated to explaining how students with an ID can access federal financial aid (see <http://www.studentaid.ed.gov/eligibility/intellectual-disabilities>).

Collaboration

Overall, survey respondents indicated a high degree of collaboration between institutions of higher education (IHEs) and LEAs and adult service agencies. Only 4% of the respondents indicated that they did not collaborate with any other agency or organization, although the list of collaborating agencies was very diverse.

The literature on the transition of students with disabilities to adult life is replete with references to the need for interagency collaboration. Necessary collaborators include K-12 systems and adult services across and within disability-related and generic systems (e.g., workforce development) (GAO, 2009, 2012; Landmark, Ju, & Zhang, 2010; Test et al., 2009). Further, both the Guideposts for Success (National Collaborative on Workforce and Disability/Youth, 2005) and the National Alliance for Secondary Education and Transition Standards (2005) have identified interagency collaboration (e.g., connecting activities) as one of the key practices for successful transition for youth with disabilities. Test et al. (2009) found that interagency collaboration is an evidence-based predictor of positive postschool employment and overall success in major life domains. Interagency collaboration is also cited as a critical practice in PSE and adult services for individuals with disabilities, and is identified with more positive postschool outcomes, such as integrated competitive employment.

Therefore, it is encouraging to see that PSE initiatives are very collaborative in practice. Having a high degree of collaboration within and across systems will aid with the sustainability of PSE programs. Further, collaboration between IHEs and adult developmental disabilities services will assist students with an ID exiting college to achieve postschool outcomes in employment and overall community living (Test et al., 2009). Collaboration can help connect students and family members with appropriate agencies so they have time to plan for needed services.

There is a continued need to study the nature of these collaborations. It will be important to know with what entities collaborators of PSE initiatives are connecting, how often these connections occur, the intensity of the collaboration, whether the collaborators provide funding and services, and the types and duration of services. Additionally, it will be imperative to know how these collaborations are established, nurtured, and maintained.

Employment

A majority of respondents indicated that their program addressed employment training or career preparation for students with an ID. Students with an ID were receiving varying levels of employment support, including job shadowing,

situational assessment, person-centered planning, job development and placement services, job coaching, transportation, and natural supports. However, the responses reflected a great deal of variability in the provision of these services and the kind of staff who provided them.

Integrated competitive employment is consistently identified as one of the most desirable transition and PSE outcomes for students with an ID (Hart, Grigal, & Weir, 2010; Simonsen, 2010; Wehman, 2010). Unfortunately, the literature shows that students with ID have higher rates of unemployment or underemployment, and earn lower wages, than their counterparts with other disabilities and those without disabilities (Harris, 2004; Wagner, Newman, Cameto, Levine, & Garza, 2006; Wehman, Inge, Revell, & Brooke, 2007).

A recent study has found that students with ID who participated in dual enrollment programs in PSE settings had a relatively high rate of paid employment (Grigal & Dwyre, 2010). A secondary data analysis of the national VR database (RSA 911) showed that youth with an ID who participated in PSE were 26% more likely to leave VR services with a paid job and earned a 73% higher weekly income (Migliore, Butterworth, & Hart, 2009). While these studies are not definitive or correlational in design, they do reveal the potential positive effect of PSE on the employment outcomes of youth with an ID.

There is a need for further research to understand how PSE impacts employment outcomes for people with an ID, and to fully understand how the various characteristics and practices used by PSE initiatives impact employment outcomes. Overall, it is known that PSE leads to improved employment outcomes for students with and without disabilities (Leonhardt, 2011; Long, 2011; Schultz & Higbee, 2007). The initial research on students with an ID in college reveals that such attendance holds great promise on improving their competitive employment outcomes as well.

This study provided a unique effort to capture the current national landscape of PSE services in the United States for youth and young adults with ID. While there are limitations, the data collected do contribute to the field in a number of significant ways. These data can be used to describe current practice as well as to serve as a baseline of practice that will be important to reference as the field evolves.

This national survey, capturing the state of the practice in the field of PSE for students with an ID in 2009, reflects a moment in time for a field that is rapidly changing. Once a collection of loosely affiliated or nonaffiliated programs started primarily by individual grassroots efforts in pockets around the country, the field has been formalized through language in the HEOA and the resulting rule making. The National Coordinating Center and 27 funded model demonstration programs are embarking on the first-ever national data-collection effort to determine promising practices and track student activities.

As it turns out, this survey was completed at an important time, right before the field it was describing embarked on significant changes. For that reason, among others, these data are important. They reflect where we were, and identify important areas that need to be further explored as we continue to develop meaningful PSE opportunities for students with an ID that result in constructive outcomes in employment, personal growth, and quality of life.

REFERENCES

- American Association on Intellectual and Developmental Disabilities. (2007). Definition of Intellectual Disability. Retrieved from www.aidd.org.
- Carnevale, A. P., & Desrochers, D. M. (2003). *Standards for what? The economic roots of K-16 reform*. Princeton, NJ: Educational Testing Service.
- Gaumer, A. S., Morningstar, M. E., & Clark, G. M. (2004). Status of community-based transition programs: A national database. *Career Development of Exceptional Individuals*, 27, 131–149.
- Grigal, M., Neubert, D. A., & Moon, M. S. (2001). Public school programs for students with significant disabilities in post-secondary settings. *Education and Training in Mental Retardation and Developmental Disabilities*, 36, 244–254.
- Grigal, M., & Dwyre, A. (2010). Employment activities and outcomes of college-based transition programs for students with intellectual disabilities. *Think College Insight Brief, Issue No. 3*. Boston, MA: Institute for Community Inclusion, University of Massachusetts Boston.
- Grigal, M., Dwyre, A., Emmett, J., & Emmett, R. (2012). A program evaluation tool for dual enrollment transition programs. *Teaching Exceptional Children*, 44, 36–45.
- Grigal, M., & Hart, D. (2010a). Postsecondary education: The next frontier for individuals with intellectual disabilities. In M. Grigal & D. Hart (Eds.), *Think College: Postsecondary education options for students with intellectual disabilities* (pp. 1–28). Baltimore, MD: Paul H. Brookes.
- Grigal, M., & Hart, D. (2010b). *Think College: Postsecondary education options for students with intellectual disabilities*. Baltimore, MD: Paul H. Brookes.
- Grigal, M., Hart, D., & Migliore, A. (2011). Comparing the transition planning, postsecondary education, and employment outcomes of students with intellectual and other disabilities. *Career Development for Exceptional Individuals*, 34, 4–17.
- Grigal, M., Hart, D., & Weir, C. (2011). *Status report from the transition & postsecondary education for students with intellectual disability coordinating center*. Presentation at the State of the Art Conference on Postsecondary Education and Individuals with Intellectual Disabilities, Fairfax VA.
- Grigal, M., Hart, D., & Weir, C. (2012). Framing the future: A standards-based conceptual framework for research and practice in inclusive higher education. *Think College Insight Brief, Issue No. 10*. Boston, MA: University of Massachusetts Boston, Institute for Community Inclusion.
- Hart, D., & Grigal, M. (2008). *The new frontier: Postsecondary education for youth with intellectual disabilities. Section 504 Compliance Handbook*. Atlanta, Georgia: Thompson Publishing, Number 351.
- Hart, D., Grigal, M., & Weir, C. (2010). Expanding the paradigm: Postsecondary education options for individuals with autism spectrum disorder and intellectual disabilities. *Focus on Autism and Other Developmental Disabilities*, 25, 134–150.
- Hart, D., Mele-McCarthy, J., Pasternack, R. H., Zimbrich, K., & Parker, D. R. (2004). Community college: A pathway to success for youth with learning, cognitive, and intellectual disabilities in secondary settings. *Education and Training in Developmental Disabilities*, 39, 54–66.
- Hart, D., Zimbrich, K., & Parker, D. R. (2005). Dual enrollment as a postsecondary education option for students with intellectual disabilities. In E. E. Getzel & P. Wehman (Eds.), *Going to college* (pp. 253–267). Baltimore, MD: Paul H. Brookes.
- Higher Education Opportunity Act (HEOA). (2008). Pub. L. No. 110–315 § 122 STAT. 3078.
- Katovich, D. (2010). *The power to spring up: Postsecondary education opportunities for students with significant disability*. Bethesda, MD: Woodbine House.

- Kleinert, H. L., Jones, M. M., Sheppard-Jones, K., Harp, B., & Harrison, E. M. (2012). Students with intellectual disabilities going to college? Absolutely! *Teaching Exceptional Children*, 44, 26–35.
- Landmark, L. J., Ju, S., & Zhang, D. (2010). Substantiated best practices in transition: Fifteen plus years later. *Career Development for Exceptional Individuals*, 33, 165–176.
- Lee, S. S., & Will, M. (2010). The role of legislation, advocacy, and systems change in promoting postsecondary opportunities for students with intellectual disabilities. In M. Grigal & D. Hart (Eds.), *Think College: Postsecondary education options for students with intellectual disabilities* (pp. 29–48). Baltimore, MD: Paul H. Brookes.
- Leonhardt, D. (2011). Even for cashiers, college pays off. *New York Times Sunday Review*, June 25 p. SR3. Retrieved from <http://www.nytimes.com/2011/06/26/sunday-review/26leonhardt.html>
- Long, H. (2011). *Advantages of going to college*. Retrieved from http://www.ehow.com/about_4744616_advantages-going-college.html
- Migliore, A., Butterworth, J., & Hart, D. (2009). Postsecondary education and employment outcomes for youth with intellectual disabilities. *Think College Fast Facts*, Issue No. 1. Boston, MA: Institute for Community Inclusion, University of Massachusetts Boston.
- Martinez, D. C., Conroy, J. W., & Cerreto, M. C. (2012). Parent involvement in the transition process of children with intellectual disabilities: The influence of inclusion on parent desires and expectations for postsecondary education. *Journal of Policy and Practice in Intellectual Disabilities*, 9, 279–288.
- National Alliance for Secondary Education and Transition. (2005). *National standards and quality indicators: Transition toolkit for systems improvement*. Minneapolis, MN: University of Minnesota, National Center on Secondary Education and Transition.
- National Collaborative on Workforce and Disability/Youth. (2005). *Guideposts for success* (2nd ed.). Washington, DC: The Institute for Educational Leadership. Retrieved from http://www.ncwdyouth.info/resources_&_Publications/guideposts/index.html
- National Organization on Disability/Harris. (2004). Survey of Americans with Disabilities. Retrieved from http://www.nod.org/research_publications/nod_harris_survey/
- Neubert, D. A., Moon, M. S., & Grigal, M. (2002). Post-secondary education and transition services for students ages 18–21 with significant disabilities. *Focus on Exceptional Children*, 34, 1–11.
- Neubert, D. A., Moon, M. S., & Grigal, M. (2004). Activities of students with significant disabilities receiving services in postsecondary settings. *Education and Training in Developmental Disabilities*, 39, 16–25.
- Neubert, D. A., Moon, M. S., Grigal, M., & Redd, V. (2001). Post-secondary educational practices for individuals with mental retardation and other significant disabilities: A review of the literature. *Journal of Vocational Rehabilitation*, 16, 155–168.
- Newman, L., Wagner, M., Cameto, R., Knokey, A.-M., & Shaver, D. (2010). *Comparisons across time of the outcomes of youth with disabilities up to 4 years after high school. A report of findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS-2)* (NCSE 2010-3008). Menlo Park, CA: SRI International.
- Newman, L., Wagner, M., Knokey, A.-M., Marder, C., Nagle, K., Shaver, D., . . . Swarting, M. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school. A report from the National Longitudinal Transition Study-2 (NLTS2)* (NCSE 2011-3005). Menlo Park, CA: SRI International. Retrieved from <http://www.nlts2.org/reports/>
- Papay, C. K. (2011). *Best practices in transition to adult life for youth with intellectual disabilities: A national perspective using the national longitudinal transition study-2*. (Unpublished doctoral dissertation). Lehigh University, Lehigh, Pennsylvania.
- Papay, C. K., & Bambara, L. M. (2011). Postsecondary education for transition-age students with intellectual and other developmental disabilities: A national survey. *Education and Training in Autism and Developmental Disabilities*, 46, 78–73.
- Raue, K., & Lewis, L. (2011). *Students with disabilities at degree-granting postsecondary institutions* (NCES 2011–018). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Schultz, J. L., & Higbee, J. L. (2007). Reasons for attending college: The student point of view. *Research & Teaching in Developmental Education*, 23(2), 69–76.
- Simonsen, M. (2010). *Predictors of supported employment for transitioning youth with developmental disabilities*. (Unpublished doctoral dissertation). University of Maryland, College Park, MD.
- Snyder, T. D., & Dillow, S. A. (2010). *Digest of education statistics 2009* (NCES 2010-013, Table 231). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- Stodden, R. A., & Whelley, T. (2004). Postsecondary education and persons with intellectual disabilities: An introduction. *Education and Training in Developmental Disabilities*, 39, 6–15.
- Test, D., Mazzotti, V., Mustian, A., Fowler, C., Kortering, L., & Kohler, P. (2009). Evidence-based secondary transition predictors for improving postschool outcomes for students with disabilities. *Career Development for Exceptional Individuals*, 32, 160–181.
- Thacker, J., & Sheppard-Jones, K. (2011). *Research brief: Higher education for students with intellectual disabilities: A Study of KY OVR counselors*. Lexington, KY: University of Kentucky, Human Development Institute. Retrieved from http://www.hdi.uky.edu/SF/Files/ResearchBrief_Summer2011.pdf
- Uditsky, B., & Hughson, A. (2012). Inclusive postsecondary education: An evidence-based moral imperative. *Journal of Policy and Practice in Intellectual Disabilities*, 9, 298–302.
- United States Government Accountability Office. (2009). *Higher education and disability needs a coordinated approach to improve its assistance to schools in supporting students* (GAO-10-33). Washington, DC: Author.
- United States Government Accountability Office. (2012). *Students with disabilities: Better federal coordination could lessen challenges in the transition from high school* (GAO-12-594). Washington, DC: Author.
- Wagner, M., Newman, L., Cameto, R., Levine, P., & Garza, N. (2006). *An overview of findings from Wave 2 of the National Longitudinal Transition Study-2 (NLTS2)* (NCSE 2006-3004). Menlo Park, CA: SRI International.
- Wehman, P. (2010). *Essentials of transition planning*. Baltimore, MD: Paul H. Brookes.
- Wehman, P., Inge, K., Revell, W. G., & Brooke, V. (2007). *Real work for real pay: Inclusive employment for people with disabilities*. Baltimore, MD: Paul H. Brookes.
- Zafft, C., Hart, D., & Zimbrich, K. (2004). College career connection: A study of youth with intellectual disabilities and the impact of postsecondary education. *Education and Training in Developmental Disabilities*, 1, 45–54.