

Employment Preparation Activities Across Inclusive Postsecondary Education Programs

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Abstract

This survey examines effective strategies for promoting employment readiness among individuals with intellectual and developmental disabilities (IDD) enrolled in inclusive postsecondary education (IPSE) programs. Analysis of data from 59 programs reveals the importance of person-centered planning and specialized instruction. However, while paid employment significantly predicts post-graduation success, only a minority of programs offer these opportunities. Collaboration with vocational agencies and career centers is also vital, yet partnerships are lacking in many programs. Addressing these gaps in support can significantly contribute to facilitating successful transitions from postsecondary education to meaningful employment for individuals with IDD.

Keywords: inclusive postsecondary education (IPSE), comprehensive transition programs (CTP), intellectual and developmental disabilities, employment education

Plain Language Summary

- **What we did in this study:** Inclusive PostSecondary Education (IPSE) programs are college programs for students with intellectual and developmental disabilities (IDD). Going to college gives people the skills they need to find good jobs and be successful in life.
 - In this study, we surveyed 59 IPSE programs and asked how they prepared their students for employment.
- **Findings:** The different programs provided internships and job opportunities, although only a few offered paid employment.
 - Many of the programs could tell us that their graduates found paid employment, though not everybody kept track. Most of the programs taught special classes on employment and had a special person in charge of employment education.
 - Finally, there are extra people who support students with IDD, like vocational rehabilitation and university career centers, but not everybody partnered with these people.
- **Conclusion:** We need to keep asking these questions to make sure every student who attends an IPSE program has the best chance for earning paid employment.

- Everybody deserves the chance to go to college if they want to, and we need to make sure IPSE programs are preparing all students for paid employment.

Across federal legislation for individuals with disabilities, including the passage of the Education for All Handicapped Children Act (Public Law 94-142) in 1977, the Americans with Disabilities Act (1990), and subsequent reauthorization of Individuals with Disabilities Education Act (IDEA) in 2004, the goal has been to create access and inclusive experiences in education, employment, independent living, and community integration for individuals with disabilities. Although progress has been made in recent years, the disparity between quality-of-life outcomes for individuals with disabilities compared to those without remains great (Friedman, 2024; Robertson et al., 2019; Yeung & Towers, 2014). For individuals with disabilities to lead satisfying, high-quality lives, they must be given opportunities to access inclusive educational environments; vocational training; adequate support services that address and support diverse needs; independent living skill development related to daily living personal care and managing one's affairs; social inclusion and community participation; and social support networks (Almalky, 2020; Baer et al., 2011; Flexer et al., 2013; Nota et al., 2007; Wehmeyer, 2020). The goal of IDEA is to create access, make progress and meet these needs in the K-12 school environment (IDEA 2004; USDOE, 2024), but there is very little protection, development, support, or progress for these quality-of-life indicators after students leave the K-12 environment. Inclusive postsecondary education (IPSE) and comprehensive transition and postsecondary (CTP) programs strive to help create these opportunities and meet these needs for students with intellectual and developmental disabilities (IDD; Grigal, Papay et al., 2022; Migliore et al., 2009).

Postsecondary Options for Individuals with Intellectual Disability

Although laws differ from state to state, students with disabilities served under IDEA typically leave high school with a traditional high school diploma, an alternate diploma, or a certificate of completion. For example, in the state of South Carolina, high school students with disabilities can earn a traditional high school diploma, an Employability Credential, or a Certificate of Attendance (South Carolina Department of Education, n.d.). A diploma indicates that students have met all the graduation requirements with or without accommodations, providing them opportunities such as acceptance into the military and colleges, and access to employment. An alternate diploma is available to students with disabilities who participate in coursework aligned to standards and take the state alternate assessment (USDOE OSERS, 2020). A certificate of attendance is traditionally awarded to students with IDD who participated in a modified curriculum and did not meet requirements for graduation (USDOE OSERS, 2020).

Individuals with disabilities who earn a traditional high school diploma can apply and be admitted to colleges and universities through the usual application process. Once accepted, they can self-disclose their disability and access support services available on campus for accommodations. They are also eligible to apply for federal financial aid. Historically, a certificate or alternate diploma prevented individuals from these opportunities. Prior to 2008, students with disabilities who had not earned a traditional

diploma were not eligible to continue their education at postsecondary institutions or receive financial aid, leaving few options.

According to the National Center for Educational Statistics (2023), among students ages 14-21 who were served under IDEA and exited school in the 2020-21 school year, 34% of students with intellectual disability (ID) received an alternate certificate instead of a traditional diploma, which before 2008, would have prevented them from pursuing any additional training at the college or university level. Fortunately, the Higher Education Opportunity Act, Pub. L. No. 110-315 (HEOA; 2008) made provisions for institutes of higher education (IHEs) to create inclusive postsecondary education (IPSE) and comprehensive transition postsecondary (CTP) programs, allowing individuals with IDD to access postsecondary education including federal financial aid, opportunities for community and independent living, and employment skills.

Comprehensive Transition and Postsecondary Programs and Inclusive Postsecondary Education Programs

Inclusive postsecondary education programs provide opportunities for individuals with IDD to participate in postsecondary education alongside their non-disabled peers. These programs focus on inclusion, independence, and employment skill development (Flexer et al., 2022). These programs often offer a range of support to ensure success for students with IDD in college settings. Support may include academic accommodations, peer mentoring, specialized instruction, and access to campus resources and services (Flexer et al., 2022; McEathron et al., 2013). The goal is to create inclusive environments where students with IDD can successfully pursue their academic and career goals alongside their peers. Students enrolled in IPSE programs typically participate in a mix of academically inclusive courses, with their peers without IDD, and specialized courses, designed specifically for students with IDD (Grigal, Papay et al., 2022).

Inclusive postsecondary education programs provide opportunities for students with IDD to attend college and universities with their peers without disabilities, and to participate in employment skills training, internship experiences, independent living, and social events (Flexer et al., 2022). Some IPSE programs provide residential opportunities as well. Most programs are 2-4 years and culminate in a certificate of completion, though more programs are now offering credentials, defined as a “verification of qualification or competency issued to an individual by an accredited institute of higher education” (Shanley et al., 2014, p. 1), which may lead to increased employability.

Certain IPSE programs are comprehensive transition and postsecondary programs or CTPs. The passage of HEOA (2008) allowed for this new category of higher education programming and provides federal monies to support these extended programs at postsecondary institutions (Lee & Taylor, 2022; McEathron et al., 2013). A CTP program is a degree, non-degree, or certificate program offered by a postsecondary school for students with intellectual disabilities that has been approved by the U.S. Department of Education (USDOE), in which students are eligible to apply for federal financial aid (e.g., the Pell grant, work study; Federal Student Aid, n.d.). These programs

require students to enroll and participate in credit-bearing, non-credit-bearing, audited classes, internships or work-based learning experiences with non-disabled peers.

In summary, both CTPs and IPSEs promote higher education opportunities for students with IDD. All CTPs are IPSEs; however, not all IPSEs are CTPs. Those programs denoted as CTPs are approved by the USDOE for federal monies while some IPSE programs are not.

The Importance of Employment Skills

Meaningful employment opportunities contribute significantly to a higher quality of life (Ra & Kim, 2016). Access to vocational training, job placement services, and inclusive workplace practices is essential for promoting economic independence. According to the U.S. Bureau of Labor and Statistics (2024), the unemployment rate of people with disabilities is double that of those without. In 2023, approximately three-fourths of persons with disabilities were not in the labor force compared to nearly one-third of the non-disabled population, and about 29% of individuals with disabilities worked part-time, compared to 16% of those without a disability (U.S. BLS, 2024).

There are several reasons that employment rates for individuals with disabilities are typically lower, and few have to do with ability to be employed. Individuals with IDD often face barriers in accessing quality education and vocational training necessary to obtain competitive employment. Individuals with disabilities may be overlooked by employers due to disability biases and stereotypes about work capacity and capabilities (Riesen et al., 2022). Despite legal protections against discrimination, individuals with disabilities still encounter prejudice and stigma in the workplace, which hinders their ability to find a job. Individuals with IDD have fewer job opportunities available due to the perception that they are less capable or productive than their non-disabled peers. Once employed, many individuals with IDD require accommodations and support services in the workplace, such as job coaching, assistive technology, or specialized transportation, which may not be readily available or easily accessed (Friedman, 2020). In some cases, individuals with disabilities might face financial disincentives to work, as they are less likely to receive full-time employment and access to promotion opportunities or employer-provided benefits such as healthcare or pension plans (Schur et al., 2017). Fortunately, one of the main goals of IPSEs is to assist in developing skills needed for employment.

Role of CTP/IPSEs in Promoting Employability

IPSEs play an important role in providing job skill training and employment skills for individuals with IDD. Smith et al. (2018) found that individuals with IDD who participated in postsecondary education with vocational rehabilitation support earned 51% higher wages than those who did not. Those students who participate in work-based experiences prior to exiting school have improved post-school employment outcomes (Mazzotti et al., 2016; Wehman et al., 2015). Typically, IPSE programs include a structured curriculum and training modules that focus on developing job skills and employability (Petcu et al., 2015). Some areas covered include communication skills, workplace etiquette, time management, problem solving, and specific job-related skills for

industries relevant to the individual's interests. Many programs offer opportunities for internships, job shadowing, and work-based learning experiences (Petcu et al., 2015). These practical experiences allow students to gain hands-on exposure to different workplaces to develop job-specific skills and build confidence in their abilities.

Additionally, most IPSEs provide individualized job coaching and support services to help students navigate the job search process, prepare for the interview, apply for the job, and succeed in the workplace (Grigal, Papay et al., 2022). Job coaches may be staff members or peer mentors that provide on-the-job training and ongoing support to help students maintain job success. CTPs and IPSEs often also include career exploration and planning. This may include assessments to identify students' interests, strengths, and career goals, as well as guidance and support in exploring different career pathways and accessing resources for job searches. Finally, many CTPs and IPSEs establish partnerships with local employers, businesses, and organizations to facilitate job placements and create opportunities for program participants. This partnership might also include community outreach and education such as job fairs, networking events, and training to promote inclusive hiring practices. Overall, CTPs and IPSEs equip students with skills, experience, and support needed to transition from school to competitive employment and achieve greater independence and self-sufficiency in the workforce.

In 2013, Petcu et al. (2015) surveyed representatives of the 166 IPSE programs listed on the ThinkCollege.net database to determine the types of vocational-related supports provided to students attending these IPSE programs. They found that the majority of students were receiving some type of vocational-related supports, including person-centered planning, career counseling, and self-advocacy training. Petcu et al. also noted that few students had the opportunity to participate in paid work, either on or off campus, and limited supports were available in the workplace. They also found that many IPSE students were connected with vocational rehabilitation (VR) agencies while enrolled. Petcu et al. did not examine the types of specialized employment education or IPSE program staffing, however. Therefore, ten years after Petcu et al. conducted their survey, we have posed the following research questions:

1. What type of specialized employment education do IPSE programs offer?
2. What types of employment opportunities and internships do IPSE programs offer?
3. How are IPSE programs staffed to support student employment education?
4. Is there a correlation between these components of employment education and post-graduation outcomes for IPSE program participants?

Method

Instrumentation

In winter of 2023, we were redesigning our own IPSE program. When researching the current approaches to employment education, we were unable to find published literature providing recommendations. Thus, we designed this survey both to assist in the redesign of our program and with the secondary goal of publishing and supporting other

IPSE programs. Respondents were asked to share how they implemented and assessed employment education, including questions about staffing support, curriculum, formal and informal coursework, and work-based learning expectations. Next, respondents shared information about post-graduation outcomes and the degree to which they partner with on- and off-campus support services (e.g., career center, vocational rehabilitation). Finally, respondents provided general program information, including length of program, number of students, and number of staff. The survey instrument comprised 27 questions. The complete survey is available for review in the supplemental materials.

Survey Distribution

The national technical assistance center for IPSE programs, Think College, publishes a directory of IPSE programs across the country. Contact information for 326 programs was available. After receiving approval for our Institutional Review Board, we emailed the Qualtrics survey link to 311 representatives of these programs, excluding programs that were labeled as summer-only transition to college programs, (e.g., CrossingPoints Summer Bridge Program at The University of Alabama). We re-sent the invitations three weeks after the initial invitation and again three weeks after that. Because the survey was completed anonymously, and it was not possible to know who had already completed the survey, follow-up invitations were sent to all 311 representatives each time. Fifty-nine program representatives responded to the survey, though three surveys were discarded as they were incomplete.

Data Analysis

After collecting data over a 3-month period in early 2023, we exported survey responses from Qualtrics to Microsoft Excel. Most questions ($n = 14$) required a single response and are reported in this manuscript as a simple count and percentage of the total respondents (e.g., Do you target employment skills as a component of your IPSE program?). Multiple responses were possible for three questions (e.g., Do you require internship or employment experiences in each semester? Check all that apply) so additional data cleaning was required prior to analysis through simple descriptive statistics. Within the demographics section of the survey, we asked respondents to answer with a whole number in six questions (e.g., How many students are enrolled in your program?) and these data are reported as range, mean, and median. Additionally, we asked respondents to write in an answer or upload a document for four questions, and these are reported as lists (e.g., What curricula do you use in your employment class?). Finally, we exported the survey responses to IBM SPSS (Version 27). After assigning numerical dummy codes for eight items, we calculated Kendall's correlation coefficient to determine whether certain factors correlated with the percentage of graduates who were meaningfully employed.

Results

Program Characteristics

Tables 1 and 2 display the demographic characteristics of the 56 IPSE programs that responded to our survey (response rate = 18%). The median number of students enrolled in each program was 20, with a range of 0 to 110. The number of full-time staff ranged from 0 to 12 with a median of three. Only one program did not have a full-time staff member. The correlation between the number of students enrolled in the program and the number of full-time staff employed was $r = .530$, $p < .001$. The number of part-time staff ranged from 0 to 12, with a median of one. Nineteen programs did not have a part-time staff member. We also asked if any of the IPSE staff members also served as faculty members at the university. A range of 0 to 10 staff members were also faculty, with a mean of 1.17, median of 0, and mode of 0.

Table 1

Demographic Characteristics of the IPSE Programs (n = 56)

Program characteristic	Number (n)	Percentage (%)
Length of program		
Two-year	18	32.1
Two-year with option for four	12	21.4
Four-year	20	35.7
Institution Type		
Four-year university	42	75.0
Community college	10	17.9
Associated with local school district	1	1.8
Other	3	5.4
Credentials		
No credentials offered	15	26.8
Working to create credential options	7	12.5
Offer credentials	34	60.7
TPSID Grantee		
Yes	10	17.9
Not any longer	8	14.3
No	32	57.1
Not sure	6	10.7

CTP		
Yes	34	60.7
No	17	30.4
Not sure	5	8.9

Note. $N = 56$; TPSID = Transition and Postsecondary Programs for Students with Intellectual Disability; CTP = comprehensive transition program

Table 2

Enrollment and Staffing Characteristics

Population	Mean (M)	SD	Median	Range
Students	23.86	21.65	20	1-110
Full-time staff	4.53	3.13	3	0-12
Part-time staff	1.92	2.76	1	0-12
Faculty	1.17	2.17	0	0-10
Paid peer mentors	16.61	18.99	10	0-100
Unpaid peer mentors	22.04	34.92	4	0-150

Note. *Faculty* was defined in the survey as paid employees working with the IPSE program who also teach courses unrelated to the IPSE program.

The primary type of sponsoring institution was a 4-year college or university (75% of respondents). Most programs (60.7%) were comprehensive transition programs (CTPs), meaning that eligible students could apply for federal financial aid. Five respondents were unsure if their program was considered a CTP or not. Additionally, 32% of respondents were either a current or former member of the grant-based Transition and Postsecondary Programs for Students with Intellectual Disability (TPSID) cohort.

Fifteen respondents stated that their program did not offer a credential. Seven programs said they were working toward creating credential options for their students. Thirty-four programs stated that they did offer credentials for their students. Note that we did not define credentials in the survey. When asked what types of credentials were offered, answers varied. Some examples include:

- Certificate of College and Career Studies
- Comprehensive Transition Program Certificate
- Community Access Certificate
- Professional Services Credential
- Career Technical Industry Certifications
- Child Development Associate Credential
- Certified Nursing Assistant
- ServSafe Certification
- 21st Century Skills for Employment
- Banquet Etiquette

Employment Education

Every respondent (100%) stated that they addressed employment skills as a part of their IPSE program, though only 32 (57.1%) formally assessed their students' employment skills. Forty-nine respondents (87.5%) offered a specialized course(s) related to employment skills. Of those 49, most ($n = 38$; 77.6%) stated that they designed their own curriculum based on individualized needs, but 11 (22.4%) used a formal curriculum. Seven respondents shared the title and publisher/author of the curriculum, which included:

- *Professionalism: Skills for Workplace Success* (4th ed.). Anderson & Bolt.
- *Job Ready. Life Ready.* Educational Associates.
- *Skills to Pay the Bills: Mastering Soft Skills for Workplace Success.* ODEP.
- *Bring Your "A" Game to Work: 7 Values That Will Make Every Employer Want to Hire You and Fight to Keep You.* Chester.
- *Work Essentials: An Online Course for Critical Job Skills.* Essential Education.
- Project SEARCH.
- *M Ploy: A Job Readiness Workbook.* McMannon, Kolarik, & Ramsay.
- *30 Ways to Shine as a New Employee.* Bissonnette.
- *Employment Path.* Oregon Developmental Disabilities Services.

Most of the respondents had a staff member dedicated to employment education. Thirty-six (64.3%) programs had a full-time staff member dedicated to employment education and 16 (28.6%) had a part-time staff member. Only four programs responded that did not have a staff-member dedicated to employment education. A majority of programs ($n = 36$, 64.3%) also responded that they partnered with the Department of Vocational Rehabilitation to support their students' employment education. Fewer programs ($n = 21$, 37.5%) responded that they partnered with their university career center for employment education.

The number of semesters in which employment experiences were provided varied significantly by program. Taking into consideration that some universities only offer two-year programs, we took a percentage by dividing the number of semesters in which employment took place (e.g., first year fall, second year fall, third year spring) by the total number of semesters offered in the program (i.e., four semesters for 2-year programs, eight semesters for 4-year programs). The percentage of semesters in which employment took place ranged from 12.5% (i.e., one semester in a 4-year program) to 100% (i.e., four semesters in a 2-year program or eight semesters in a 4-year program). Only two respondents stated that their program did not follow a traditional fall/spring semester schedule.

Additionally, we asked if the program offered work experiences in the form of internships or jobs, either on or off campus and paid or unpaid. We defined internship as "a time-limited opportunity to learn about a career or job skill" and a job as "long-term employment, expected to continue, assuming the employee meets set expectations." Most of the respondents offered multiple forms of work experiences in their IPSE

programs (see Table 4). Of note, eight programs only offered on-campus work experiences and six programs only offered off-campus work experiences. Nine programs only offered paid work experiences, and thirteen only offered unpaid work experiences. Finally, 21 programs only offered internships and two only offered jobs.

Post-graduation Outcomes

Additionally, we asked the respondents to share the percentage of students who had paid employment upon graduation (see Table 3). The majority ($n = 22$) responded that 75-99% of their graduates held paid employment. Eleven respondents stated that they did not have any employment data for their graduates available. Recognizing that our data were relatively limited, we were curious if a correlation existed between the percentage of graduates meaningfully employed and the following factors: (a) job coaching provided, (b) partnership with vocational rehabilitation, (c) credentials offered, (d) length of program, (e) number of full-time staff, (f) TPSID grant awardee, or (g) comprehensive transition program. The only factor that had a significant correlation to the percentage of graduates meaningfully employed was if the program was a CTP ($\tau = -0.407$, $N = 45$, $p = .004$, two-tailed).

Table 3

Employment Characteristics of the IPSE Programs (N = 56)

Employment characteristic	Number (<i>n</i>)	Percentage (%)
Dedicated employment staff member		
Yes, full-time	36	64.3
Yes, part-time	16	28.6
No	4	7.1
Internship course		
Yes	39	69.6
No	17	30.4
Employment course		
Yes	49	87.5
No	7	12.5
Assess employment skills		
Yes	35	62.5
No	21	37.5
Postgrad employment		
Fewer than 25% of graduates	2	3.6
25-49% of graduates	4	7.1
50-74% of graduates	11	19.6
75-99% of graduates	22	39.3
100% of graduates	6	10.7
No data available	10	17.9

Employment characteristic	Number (<i>n</i>)	Percentage (%)
Partnership with career center		
Yes	21	37.5
No	35	62.5
Partnership with vocational rehabilitation		
Yes	36	64.3
No	19	33.9

Table 4*Work Experiences Offered*

Work Experience	<i>n</i>	%
Number of semesters work is required		
One	5	8.9
Two	8	14.3
Three	9	16.1
Four	4	7.1
Five	2	3.6
Six	12	21.4
Seven	4	7.1
Eight	10	17.9
Don't follow a semester-based schedule	2	3.6
Types of work experiences offered		
On-campus unpaid internship	39	69.6
On-campus paid internship	26	46.4
On-campus paid job	23	41.1
Off-campus unpaid internship	35	62.5
Off-campus paid internship	27	48.2
Off-campus paid job	29	35.7
Job coaching		
Provided by full-time staff	30	53.6
Provided by part-time staff	20	35.7
Provided through Vocational Rehabilitation	20	35.7
Provided by peer mentors	22	39.3
Not provided	5	7.1

Discussion

Best practices for CTPs indicate that programs should use person-centered planning to integrate the goals, skills, needs, and interests of students with IDD into the job training experiences. Person-centered planning also allows IPSE staff to provide

individualized supports (Weinbrandt et al., 2023) as well as natural supports and job coaching on employment training sites. To secure successful post-school employment, IPSEs should provide scaffolded employment skill training and offer a variety of job experiences and internships on and off campus, hopefully culminating in paid employment. Ideally, CTPs and IPSEs should offer scaffolded job training and work experiences such as interview skills, resume building, job shadowing, unpaid internship, and paid internship leading to the goal of paid employment to provide students with a variety of experiences in preparation of post-school employment. Most of the programs surveyed offered multiple forms of work experiences in their IPSE programs (see Table 4). Of note, eight programs only offered on-campus work experiences, and six programs only offered off-campus work experiences. While paid employment has been found to be a promising predictor of post-school independent living and employment (Mazzotti et al, 2021), only nine programs offered paid work experiences, and thirteen offered unpaid work experiences. Finally, 21 programs only offered internships and only two offered jobs. Further research should be done to explore the types of internships students experience and the job-specific skills gained at those sites.

Studies show that completing a CTP program is a predictor of paid employment (Moore & Schelling, 2015). The data from this research also shows the that only factor that had a significant correlation to the percentage of graduates meaningfully employed was if the program was a CTP ($\tau = -0.407$, $N = 45$, $p = .004$, two-tailed). Further researchers may wish to investigate the reason for this statistical significance. As programs who seek CTP status must meet requirements outlined in the HEOA (2008), one of which is that the goal of the program must be to prepare students for gainful employment, perhaps this finding is unsurprising.

IPSE programs vary, with some programs offering a fully inclusive program and others offering a fully specialized program, with most using a hybrid model (Grigal & Hart, 2010). Most respondents (87.5%) stated that they offer a specialized course, or courses, related to employment skills. However, we were surprised to find that only 57.1% assessed employment skills. Of the 49 respondents who provided specialized employment courses, 38 designed their own curriculum based on individualized needs and 11 used a formal curriculum. It is not known now if there is a clear benefit to either method. A potential benefit of designing curriculum would be the ability to align with person-centered planning, to meet the unique needs of the students who attend IPSE programs. Conversely, a potential benefit of adopting a textbook or formal curriculum could be a standardization of the education students receive to be successful in the workplace. This may be particularly important in IPSE programs with fewer full-time staff members where, perhaps, peer mentors are facilitating instruction in these specialized courses.

We were surprised to find that most of the programs did have a full-time or part-time staff member dedicated to employment education. Only four programs did not have a staff member dedicated to employment education. This brings into question the funding sources for these staff members, a question we did not pose in this survey. One major source of funding for IPSE programs is the TPSID model grant, but this funding is only awarded to a percentage of IPSE programs (Grigal, Hart et al., 2022). As representatives

of a program which is tuition- and donation-funded, we are part of the minority that does not currently have a staff member dedicated to employment education. It would be interesting to further investigate the role of the employment staff members, including their qualifications and outcomes.

The Workforce Innovation and Opportunity Act (WIOA, 2014) mandated that state vocational agencies set aside at least 15% of their federal funds to provide pre-employment transition services for eligible students, including job exploration counseling, workplace learning experiences, workplace readiness training, counseling on opportunities for postsecondary educational programs, and instruction on self-advocacy. Despite this legislative support, many students transition from their secondary education with poor employment outcomes. Most programs (64%) that responded to the survey indicated that they partnered with vocational agencies to support student employment. However, many secondary students do not connect with these agencies in high school and at least one-third of the CTPs/IPSEs surveyed did not partner with these agencies. Early paid employment experiences have been found to be the strongest predictor of later employment for students with disabilities (Mamun et al., 2018; Mazzotti et al., 2021), so individuals with IDD should begin these pre-employment transition services as mandated by their individualized education program (IEP) while still in high school. Comprehensive transition programs and IPSEs can then build on that partnership and pre-employment skills learned. Only 37.5% of the programs responded that they partnered with their university career center for employment education. Given that one of the goals of IPSE programs is to include students in campus and community life, programs should partner with these offices to assist students in using the services and resources utilized by traditional students. University career centers can assist with interviewing skills, mock interviews, resume writing, and job connections throughout the community. With the goal of independent living, community involvement, and employment in mind, it is vital that IPSEs help students with IDD in accessing and navigating the services and resources available on campus and in the community to help them progress towards these goals.

Limitations and Future Directions

A limitation of the study was the relatively small n . There are a total of 311 IPSE programs listed on the Think College database and we received completed surveys from 56 respondents for a response rate of 18%. Because of the small number, the statistical analyses we were able to run were limited. It is likely that further correlations between program characteristics and employment outcomes do exist, but that our numbers were too small to identify them in this survey. Relatedly, rather than asking for a discrete percentage of graduates who obtained meaningful employment, we asked respondents to mark if 0-25%, 26-50%, 51-75%, 66-99%, or 100% of graduates were meaningfully employed. We did so based on the assumption that respondents may not have specific numbers for employment data, as at the time, neither did we, but it did limit the types of statistical calculations we could perform. Perhaps as more IPSE programs seek CTP status and accreditation through the Inclusive Higher Education Accreditation Council (National Coordinating Center Accreditation Workgroup and IHEAC, 2024) we will have stronger data on which to determine further correlations.

The nature of survey research, in which participants are responding to predetermined questions with no opportunity for follow-up, was another limitation. As we reviewed the data, we found ourselves wanting more information, particularly as it relates to the types of curricula used and credentials offered by the programs. To ensure understanding of the terms and definitions used by each program, future researchers should also consider aligning survey questions to the IHEAC (2024) standards. Future researchers should consider conducting focus groups, particularly with IPSE programs not awarded TPSID grants, as TPSID grantees represent a minority of IPSE programs but a majority of the data in the extant literature and have access to additional financial resources not available to many IPSE programs.

An area we did not fully examine in this study was employment skills assessment. Approximately half the respondents stated that they formally assessed their students' employment skills. As we conducted this survey to also support our own program's redevelopment, we asked the respondents to share their evaluation tool if they were willing, but only four respondents did so. While we appreciate greatly the willingness of these programs to share, we did not have enough data at this time to analyze the tools and make generalizations or suggestions. Future researchers should review assessment methods across programs which may become more standardized as more programs seek accreditation through IHEAC.

Finally, we were limited by the inconsistencies in data collection for post-graduate outcomes. Although a majority of respondents shared that their graduates had achieved employment upon graduation, 11 respondents (19.6%) did not have any data on graduates' employment. Perhaps, as more IPSE programs seek accreditation through Inclusive Higher Education Accreditation Council, more programs will collect data and further research can be completed on the connections between employment education practices in IPSE programs and employment rates of the graduates with IDD.

Implications for Practitioners

As the number of IPSE programs continues to grow, our goal is to increase the quality of opportunities available to students with IDD through information sharing via surveys, conference presentations, and practitioner articles. Based on the findings of our survey, the primary suggestion we can make for IPSE program directors is to seek CTP status. Resources providing support for achieving this status are available on the ThinkCollege website (e.g., Weir & Papay, 2017).

Finally, we recognize that each program has its own set of barriers and resources. We encourage IPSE program directors to continue talking with each other as we determine the best way to support our students with IDD. There is a wide variety of resources available to support employment education, but not all resources will work for every program. For example, programs that do not have a dedicated employment staff member may need to strengthen their connections with their university career services office. Programs in which students participate in more specialized instruction rather than traditional university offerings may need to strengthen their connections with vocational rehabilitation services. For now, we recommend that all IPSE programs review the

standards for accreditation through IHEAC, even if they are not actively seeking accreditation. We recommend that programs begin with the Student Achievement Standards (IHEAC, 2024), which addresses the evaluation of student outcomes, including career development and employability. Collecting this data will allow researchers and practitioners alike to determine the effectiveness of their practices, given the specific contexts in which they support their students.

Conclusion

Access to postsecondary education improves quality of life outcomes for individuals with IDD, particularly in employment training. Completing a CTP has been found to be a strong predictor of employment (Moore & Schelling, 2015), and as our research indicated, 75-99% of the graduates from a majority of programs surveyed achieved paid employment post-graduation. Still, many programs did not collect post-graduation data from their graduates. Since this is an important indicator of success, IPSE programs should make every effort to collect this data. Additionally, early paid employment experiences have been found to be the strongest predictor of later employment for students with disabilities (Mamun et al., 2018; Mazzotti et al., 2021), yet one-third of programs surveyed did not connect with vocational rehabilitation or offer paid employment experiences. While all programs offered a variety of work experiences, only 9 out of 59 programs offered paid employment experience. Given that this is the strongest predictor of later employment, IPSEs should look to provide as many paid employment experiences on or off campus as possible. As higher education continues to be more accessible for students with IDD, continued data should be collected to ensure quality and equitable employment education and experiences for all students.

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Appendix 1*IPSE Employment & Internship Survey*

Do you target employment skills as a component of your IPSE program?

- Yes
- No

Do you have (or are you a) staff member devoted to addressing employment?

- Yes, full time
- Yes, part time
- No

Do your students take a formal course associated with their employment/internship opportunity (e.g., a one credit hour internship course)?

- Yes
- No

Do you require internship or employment experiences in each semester? Check all that apply:

- First year, First semester
- First year, Second semester
- Second year, First semester
- Second year, Second semester
- Third year, First semester
- Third year, Second semester
- Fourth year, First semester
- Fourth year, Second semester
- We don't follow a semester-type schedule

Do your students participate in any of the following employment opportunities? (select all that apply). We define internship as a time-limited opportunity to learn about a career or job skill, and a job as long-term employment, expected to continue assuming the employee meets set expectations.

- On-campus unpaid internship
- On-campus paid internship
- On-campus paid job
- Off-campus unpaid internship
- Off-campus paid internship
- Off-campus paid job

Do you provide job coaching? (select all that apply)

- Yes, through full-time staff
- Yes, through part-time staff
- Yes, in collaboration with vocational rehabilitation (VR)
- Yes, through peer mentors
- No

Do you offer a specialized instruction course targeting employment skills?

Yes

No

If yes, do you follow a specific curriculum (i.e., a commercially available curriculum)?

Yes

No, we design lessons based on students' current support needs

If yes, are you willing to share the title/publisher of your curriculum?

Do you formally assess your students' employment skills?

Yes

No

If yes, are you willing to share your evaluation tool? (Upload PDF, Word, etc.)

How many of your students are employed (paid) post-graduation?

100%

75-99%

50-74%

25-49%

>25%

No data available

Do you partner with your on-campus career center when planning for employment experiences and internships?

Yes

No

Do you partner with vocational rehabilitation when planning for employment experiences and internships?

Yes

No

How long is your IPSE program?

Two years

Four years

Two years with an option of continuing on to four

Do you offer specific credentials or certificates through your IPSE?

Yes (list) _____

No

Not yet, but we are working to create them

How many students are currently enrolled in your IPSE program?

Number of Students _____

How many full-time staff (not student employees) are employed in your IPSE?

Full-Time Staff _____

How many part-time staff (not student employees) are employed in your IPSE?

Part-Time Staff _____

How many staff members are also faculty (i.e., teaching courses not associated with the IPSE)?

Faculty _____

How many paid peer mentors/student employees are associated with your IPSE?

Paid Peer Mentors _____

How many unpaid peer mentors/volunteers are associated with your IPSE?

Volunteer Peer Mentors _____

What is your role within your IPSE program?

Are you a community college or a four-year university?

Community College

Four-year University

Associated with a local school district/high school

Something Else _____

Are you a comprehensive transition program (CTP)?

Yes

No

I'm not sure

Do you receive funding as a Transition and Postsecondary Program for Students with Intellectual Disability (TPSID) through ThinkCollege?

Yes

No

Not any longer, but we did in past cohorts

I'm not sure