

NCCSD Research Brief

College Students with Disabilities and Employment: Career Development Needs and Models of Support

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Abstract

The purpose of this research brief is to summarize the literature on the career development needs of college students with disabilities, highlight exemplary models of support, and provide recommendations on best practice and future efforts to support positive employment outcomes for persons with disabilities. Four key career development areas are identified: career-related knowledge, work-related experience, job search skills, and disability-related knowledge and self-advocacy. Common themes from the existing literature are synthesized into indicators of evidence-based practice. Models of support at the national, regional, and university-level are reviewed. Recommendations for best practice are provided, as well as future considerations for improving and expanding existing supports. (Contains 1 figure)

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Introduction

It is well known that persons with disabilities are chronically under- or unemployed (U.S. Department of Labor, 2018a). This reality holds true even for college graduates with disabilities. While a degree may grant some advantage, these students are still not seeing the same rates or levels of employment as their non-disabled peers. They are less likely to hold professional positions, including positions that actually require post-secondary degrees. Many graduates are employed in roles with limited opportunities for professional advancement, and limited benefits (Enright, Conyers, & Szymanski, 1996; Nicholas, Kauder, Krepcio, & Baker, 2011; Roessler, Hennessey, & Rumrill, 2007). While all recent graduates must meet specific job qualifications and demonstrate transferable skills, graduates with disabilities must also anticipate and determine their need for accommodation, navigate disclosure conversations, be knowledgeable about disability law, and generally be prepared to contend with employers who may be hesitant to hire individuals with disabilities (Nicholas et al., 2011; Roessler et al., 2007).

While college graduates with disabilities are encountering these challenges, they may not be fully aware of their own career development needs. In a study by Hitchings, Luzzo, Ristow, Horvath, Retish, and Tanners (2001), 53 percent of college students surveyed were unsure what their needs and experiences would be upon entering the world of work. Yet, only 13 percent believed their disability would *not* be impactful. In Schriener & Roessler's (1990) survey of students' self-perceptions regarding employment, weaknesses included access to resources such as social security, health insurance, and college funding, as well as overall career preparation. Strengths included the opportunity to access higher education, and respect from faculty and staff who are knowledgeable regarding disability-related issues. In light of these strengths, any campus with an effective disability services model (and accompanying school climate) has the foundation for supporting the employment and career development needs of students with disabilities. The challenge is to not only recognize those needs, but to also address them. This is where students perceive their colleges and universities fall short.

Schriener and Roessler's findings can serve as a lens for viewing the problem at hand. Student services in higher education need to develop evidence-based, structured models of support that provide students with disabilities the tools and training they need to effectively overcome employment barriers.

The purpose of this research brief is to:

- 1) **Review the literature** on career development needs of students with disabilities
- 2) **Highlight existing models** of support, and
- 3) **Provide recommendations** for practice and systems level change.

Readers will gain an understanding of best practices in supporting the career-related development and employment outcomes of students with disabilities.

Career Development Needs of Students with Disabilities

The Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act established the mandate that students with disabilities have equal access to all amenities and benefits of life on campus, and this includes effective career services. As more students with disabilities in higher education began accessing these services, a small body of literature emerged with a focus on the career development needs of this population. From focus groups, case

studies, and surveys, researchers have established several areas of concern in which students with disabilities report encountering barriers to their career development.

Career-Related Knowledge

Upon entering college, students with disabilities may lack vocational awareness compared to their peers for a variety of reasons: secondary education may have focused on academic and life skills at the expense of transition planning and career exploration, limited expectations of others, and therefore limited exposure to a range of career opportunities, limited paid work experience, or prioritizing work experiences that meet financial needs rather than career exploration needs (Hitchings et al., 2001). Just as special educators at the secondary level are mandated by IDEA to provide transition planning to students receiving Individualized Education Programs (IEPs), Hitchings et al. (2001) assert “it is [higher education’s] responsibility to be proactive in developing programs and services that will help students with disabilities understand the career development process and think of life beyond graduation” (p.15).

Indeed, college students with disabilities are likely to under-explore their career options compared to their peers; they register with career services and join professional organizations and networks at lower rates (Friehe, Aune, & Leuenberger, 1996; Hennessey, Roessler, Cook, Unger, & Rumrill, 2006; Thompson & Dickey, 1994) This under-utilization of career supports suggests that the existing programs at higher education institutions may not meet the needs of students with disabilities. Hennessey et al. (2006) found that students perceived a lack of disability-related knowledge among career counselors, and a lack of career-related knowledge among disability services counselors.

The implications from the literature are two-fold: 1) higher education staff need to be informed about disability-related issues in order for students to view them as resources for career-related knowledge, and 2) higher education staff must have high expectations for students with disabilities in order to increase student engagement in career exploration.

“...students perceived a lack of disability-related knowledge among career counselors, and a lack of career-related knowledge among disability services counselors.”

For many students, career-related knowledge begins with their academic experience. Ideally, faculty are in a strong position to support the student as they consider the interaction between their disability and environment. Faculty have the helpful vantage point of understanding both the professional skills and expectations in the field, as well as the accommodations the student has required in the classroom.

Collaboration between disability services and career services can provide a similar combination of expertise regarding the interaction of a student’s disability and environment. This model of support may become more relevant as students begin to consider off-campus work-related opportunities such as job shadowing, internships, and co-ops. To better support the career-related knowledge of students with disabilities, professional development and training for postsecondary staff must set high expectations for the career success of students with disabilities by highlighting self-determination and self-advocacy skills (Hennessey et al., 2006). Once these expectations are established, staff can then cultivate high expectations with employer partners as well, such as assisting campus recruiters in connecting with students with disabilities, or educating employers on workplace accommodation resources and potential benefits and incentives for hiring individuals with disabilities (Hennessey et al., 2006).

While higher education professionals are important first-order resources for students looking to grow their career-related knowledge, much of this information is best gained through on-the-job experience (Aune & Kroeger, 1997; Burgstahler, 2001; Roessler et al., 2007).

Work-Related Experience

Students with disabilities engage in work-related experiences at lower rates than their peers. This includes work-study, paid part-time work, co-ops, and internships (Hennessey et al., 2006; Thompson & Dickey, 1994). As Burgstahler (2001) asserts, this is particularly problematic given that “students with disabilities benefit from work-based learning activities as much as, if not more than, their non-disabled peers” (p. 209). Students are able to apply academic skills in real-world situations, learn about job possibilities as well as conditions of employment, practice disclosure, identify and implement workplace accommodations, and generally develop attitudes, skills, and behaviors that will make them competitive candidates and valuable employees (Burgstahler, 2001).

Disability services providers should be able to articulate these benefits of work-related experience to students, co-op advisors, employers, and other stakeholders. Career services and disability services staff can engage in cross-trainings and collaboration to ensure that job shadowing, internship, and co-op programs are not only accessible, but relevant and meaningful to all students. Students with disabilities should be participating in these programs at the

Select Resources for Students' Job Search

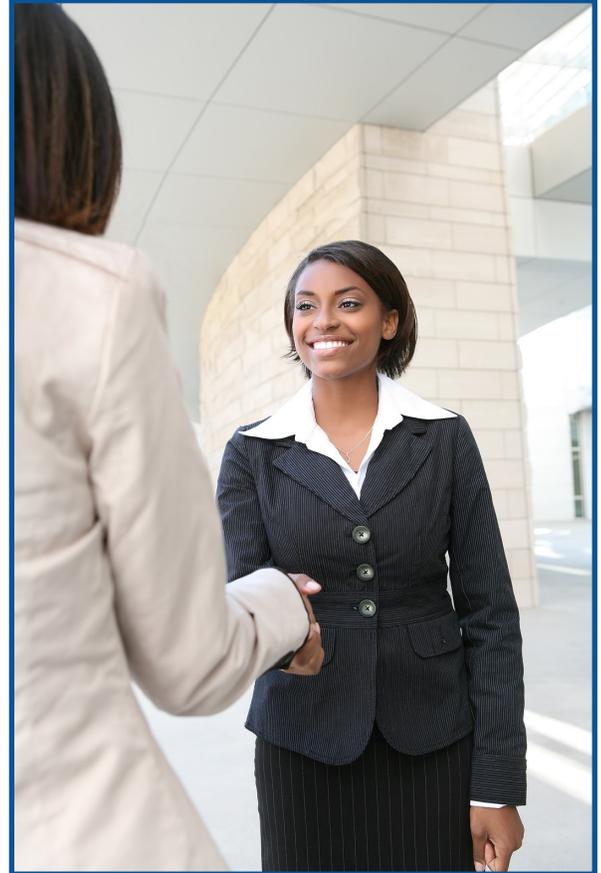
- “Preparing for a Career: An Online Tutorial” by DO-IT
<https://www.washington.edu/doit/preparing-career-online-tutorial>
- National Collaborative on Workforce and Disability
<http://www.ncwd-youth.info/>
- Office of Disability Employment Policy (ODEP) at the U.S. Department of Labor
<https://www.dol.gov/odep/>
- The Job Accommodation Network (JAN)
<https://askjan.org/index.cfm>
- USAJOBS information about working for the Federal government.
<https://www.usajobs.gov/Help/working-in-government/unique-hiring-paths/individuals-with-disabilities/>
- Resources for Job Seekers with Disabilities by Respectability
<https://www.respectability.org/resources/job-seekers-disabilities/>

same rate as their peers, with comparable outcomes (as measured by supervisor evaluations, offers of full-time employment, etc.).

Job Search Skills

Thompson and Dickey's (1994) research summarized the importance of career-related knowledge and work-related experience with the finding that students who are satisfied with their college major, and feel confident in what kind of job to look for, have more positive self-perceptions of their job search skills. Programs that support these two areas foster the development of a life skill that students with disabilities can apply throughout their careers.

Students with disabilities need to develop a distinctive set of job search skills that include: knowledge of disability-specific job boards, career fairs and databases; knowledge of employers with diversity and inclusion initiatives and special interest groups; self-identification and disclosure skills; understanding of workplace accommodations and assistive technology training; and interviewing skills (Friehe et al., 1996; Hennessey et al., 2006; Thompson & Dickey, 1994). These may help students to access affirmative action opportunities such as Schedule A Hiring Authorities and select employers with cultures that are inclusive and supportive, while proactively anticipating job functions that will require accommodations, and taking control of the disclosure process in a way that presents their disabilities in a positive manner.



Student support staff can address job skill development by sharing information and expertise across disability and career services. This may include access to resources such as disability-specific job boards or assistive technology; facilitating conversations around disclosure and workplace accommodations; or planning and hosting career events specifically for students with disabilities. Programming should be designed with direct input from students with disabilities and allow for individualized support plans to meet each student's skill development needs. Ultimately, the student is the expert on their disability, and has the responsibility to turn self-awareness into self-advocacy, using the tools and skills they have developed through student support services.

Disability-Related Knowledge and Self-Advocacy

College students and employees are responsible for self-identifying as individuals with disabilities and requesting appropriate disability accommodations. In order for a student to successfully advocate for their needs, they need to have a strong understanding of their disability, its impact across a range of environments, and the rights and protections afforded to them under applicable law. What is more, they must also be able to articulate this information in a manner that is effective and professional (Thompson & Dickey, 1994). Disability-related knowledge and self-advocacy are often areas of weakness in students' career development. Hitchings et al. (2001) reported that 75 percent of students surveyed had difficulty describing their disability, while more than 50 percent could not evaluate how their disability might impact them in the workplace. Thompson and Dickey (1994) found that students struggled to describe how the ADA protects them in their employment search and they lacked confidence in their ability to disclose to an employer.

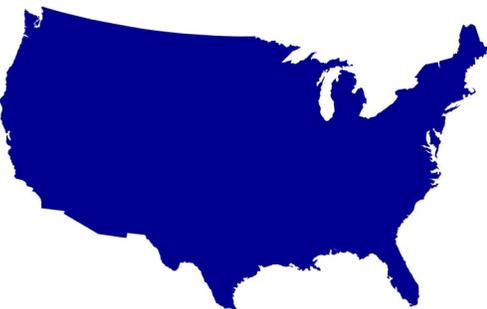
Recommendations from the literature (Hennessey et al., 2006; Hitchings et al., 2001) point to informational programming such as workshops and exit interviews, and educating students about employment and anti-discrimination law, health insurance and benefit planning, self-disclosure strategies, hiring incentives, and other resources to facilitate their self-advocacy skills.

Research-to-Practice

A small body of literature exists on pilot programs that were conducted at colleges and universities across the U.S. during the 1990's and early 2000's. These programs attempted to address the career development needs of students with disabilities and provide a foundation for evidence-based practices. Though most outcome data collected on these programs was qualitative, the following components received positive feedback from students and employers:

- **Courses** on: career exploration and work experience, designed specifically for students with disabilities, or in which students with disabilities are given priority registration
- **Individual and group counseling** on: career interests; intersection of identity, disability, and career interests; career exploration courses; career counseling; job shadowing; career plan development
- **Student trainings** including: interview skills, disclosure, self-advocacy
- **Student referrals** including: state rehabilitation services, independent living centers
- **Work-related support** including: job search assistance, career placement services, accommodation identification, mentorships, internships, on-the-job supervision and site visits
- **Employer trainings and support** including: employer forums, supervision of student employees, site visits, accommodation planning, matching services
- **Training for higher education institutions** including: cross-training and utilization of staff and resources from disability services, career services, co-op programs, and veterans' services

There are a number of current models of support that build on this foundation of evidence-based-practice. The following overview of existing models of support highlights programs at the national, regional, and campus levels. Each program incorporates various elements of evidence-based practice from the literature.



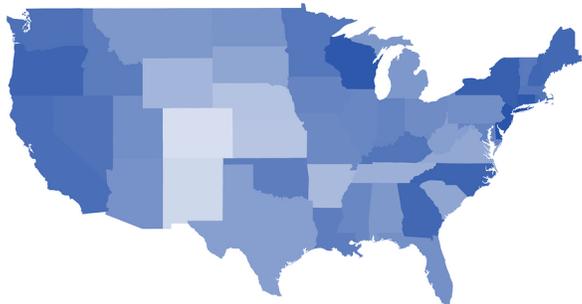
National Level

Programs existing at the national level focus primarily on work-related experiences, connecting employers to talented students with disabilities. To varying degrees, they may address additional career development needs of students with disabilities.

- **Disability:IN (formerly USBLN)**. The U.S. Business Leadership Network's Rising Leaders Initiative seeks to connect corporate partners with

college students and recent graduates with disabilities. Students can apply to a six-month mentoring program or to the annual Rising Leadership Academy, which includes networking and career-readiness opportunities. According to the 2017 USBLN Annual Report, on average 85% of Rising Leaders are employed since the inception of the program (U.S. Business Leadership Network, 2017). For additional information, visit <https://disabilityin.org>.

- **DO-IT.** The DO-IT Center serves pre-college and college students with disabilities through a community partnership model. DO-IT's AccessCollege program includes 'The Employment Office' which provides information, resources, and best practices for students, parents, and educators. DO-IT's employment-related resources were originally derived from the AccessCAREERS program, funded by the U.S. Department of Education. This program addressed a range of areas including career-related knowledge (e.g. counseling, mentoring), work-related experience (e.g. placement in internships, worksite support), job search skills (e.g. technology acquisition, resume review, mock interviews), and self-advocacy (e.g. information on legal rights, accommodations, Social Security). For additional information, visit <https://www.washington.edu/doit/>
- **Emerging Leaders.** Emerging Leaders connects college students with disabilities to paid internships, reasonable accommodations, and meaningful experiences with employers. Students may apply on a rolling basis, and program staff actively recruit through campus partners as well. The program provides ongoing support to interns and employers as needed, as well as student conferences on work-related skills and strategies for managing disabilities in the workplace. As reported by Nicholas et al. (2011), Emerging Leaders placed students in 105 internships, 19 of which resulted in full-time employment. The program has also received strong feedback from employer partners and students. One hundred percent of employers noted that they would consider hiring their intern, and 90 percent of students reporting their internship experience helped to clarify their career-related goals. For additional information, visit www.emerging-leaders.com.
- **Lime Connect.** Lime Connect staff conduct recruitment outreach through campus disability and career services offices. Students may participate in recruitment receptions, a fellowship program, scholarships, and campus events. The Lime Connect Network includes services such as career coaching and professional development. Lime Connect aims to build student's self-confidence and disability-awareness, while also providing job search support and connections to meaningful work-related experience. For additional information, visit <https://www.limeconnect.com>.
- **Workforce Recruitment Program (WRP).** The WRP connects students with disabilities to federal and private sector employers by establishing a database of highly qualified candidates. WRP recruiters work directly with campus coordinators at higher education institutions across the nation, to identify and screen students who are seeking summer or full-time employment. Campus coordinators may be located in the campus disability, career, or veteran's services office. According to the WRP, over 7,000 students have received temporary and permanent employment since the program's expansion in 1995 (U.S. Department of Labor, 2018 b). While the WRP focuses primarily on workforce supply, the program does provide a resource guide for students, which includes links to information regarding accommodations, disability disclosure, and job search tools. WRP staff also offer consultation and resource referrals to campus coordinators as necessary. For more information on the WRP, visit <https://wrp.gov>.



Regional Level

Programs at the regional level take advantage of community-based resources, such as state vocational rehabilitation services, local employers, and higher education partners to provide more comprehensive career development while connecting students to work-related experience.

- **Broad Futures.** Currently based in the Washington, D.C. area, this program provides holistic training and mentorship while placing young adults in paid internships. Broad Futures has partnered with local businesses to match their employment needs with the experience and skills of young adults with learning disabilities. Ongoing training, supervision, and mentoring focuses on stress management, communication, and workforce preparedness. Employers receive education on workplace accommodations and an opportunity to connect with other employers to share best practices. In the past four years, Broad Futures has served over 120 students directly and partnered with 40 employers. Over 99 percent of interns completed the program successfully and received positive recommendations, while over 90 percent of interns returned to school or work upon completing the program, while also demonstrating increased self-advocacy and stress tolerance. It is also worth noting that 100 percent of employers reported an increased interest in hiring individuals with disabilities, and that the intern had a recognizable benefit to the company, as well as a positive effect on the overall workplace (E. Sheffield, personal communication, August 17, 2018). For additional information, visit <http://www.broadfutures.org>.
- **California Community College System.** “College to Career” represents a collaboration among the California Community College Chancellor’s Office, Department of Rehabilitation, and the UCLA Tarjan Center (focusing on disabilities education, research, and service). College to Careers is a three-year program providing access to higher education and vocational training for students with intellectual disabilities and autism. Program elements include career exploration, work-related experience, and internships. For additional information, visit: <https://www.semel.ucla.edu/opendoors/college-career>



- **Campus Career Connect.** Currently open to students in Massachusetts, Maine and Connecticut, Campus Career Connect (C3) is an eMentoring program sponsored by Partners for Youth with Disabilities. C3 matches college students with disabilities to mentors in the student’s desired career field. Monthly C3 webinars also cover career-related development topics such as resume writing, interview skills, and disability disclosure. For additional information, visit <https://c3.pyd.org>.

- **Campus to Careers.** Currently piloted in Massachusetts, Campus to Careers (C2C) is hosted by the National Organization on Disability and represents a collaboration between university and corporate partners. The goal is to connect students to work-related experiences, by communicating job openings and other opportunities. Students enrolled in C2C also receive access to Partners for Youth with Disabilities’ Campus Career Connect platform (see below). Currently, C2C has enrolled 125 students and hosted 10 on-campus events, while training close to 150 personnel at participating employers on disability awareness, etiquette, and interviewing. These trainings are also offered to university partners. According to C2C leadership, higher education collaborations are currently focused on partnering with career services, to improve the support services they provide to student with disabilities during their job search. Campus disability services play a role in connecting students to C2C. Relatedly, C2C aims to educate students and higher

education staff on the benefits of disclosing disability in order to better meet students' career development needs (F. Nurmsen, personal communication, August 28, 2018). For additional information, visit <https://www.nod.org/innovation/campus-to-careers/>

Institutional Level

Campus-based programs support students in acquiring disability-related knowledge, career-related knowledge, and job search skills by utilizing existing disability and career services supports. Some colleges and universities have expanded models that involve active partnerships with regional and national programs, and recruitment efforts with employers.

- ***George Washington University (GWU).*** Career development services are provided through Disability Support Services (DSS), through a full-time Career Counselor on staff. These services are provided under the "Strategic Skills Services" umbrella, which also includes Academic Skills and Study Abroad support. The Career Counselor position is relatively new and was created in response to student requests for this type of support, as well as DSS staff's knowledge of the poor employment statistics regarding individuals with disabilities. Students registered with DSS have the option to schedule appointments at various stages in their career development, such as: career research, goal setting, materials preparation (e.g., resumes, cover letters), application support, and interview preparation. The Career Counselor also attends trainings with the university's Career Services staff, and is actively working to engage employers in recruitment events specifically for students with disabilities (A. Leach, personal communication, August 31, 2018).



Examples of recent GWU initiatives and programming include:

- Collaboration with the U.S. Agency for International Development (USAID) regarding networking and upcoming career opportunities
- Planning a disability disclosure workshop with Lime Connect
- Promoting student attendance at the university's fall career fair by creating a "bingo" card highlighting employers who are recruiting students with disabilities

For additional information, visit: Disability Support Services' career development webpage: <https://disabilitysupport.gwu.edu/career-development>

- ***Michigan State University (MSU).*** "Careers Collaborative" services are provided through a full-time on-campus rehabilitation counselor, made possible with funding from a private donor. The university's disability services office (Resource Center for Persons with Disabilities, RCPD) refers eligible students to Michigan Rehabilitation Services (MRS), and staff from both offices meet bi-weekly to collaborate and educate. Careers Collaborative staff advertise available jobs on a weekly basis, meet with academic advisors to discuss major and career fit, and support students directly in their job search and developing job readiness skills, such as writing resume and

interviewing. Students registered with RCPD who may not qualify for MRS services do have access to a career consultant on staff in the disability services office. RCPD also partners with the Career Services office and MSU Federal Credit Union to host a twice-annual dining etiquette experience, to support the development of dining interview skills (W. Hilliker, personal communication, August 28, 2018).



Examples of recent Careers Collaborative initiatives and programming include:

- Workshops with state and federal employers, focusing on internship opportunities and the application process
- A “distance teaching and learning” webpage that outlines the career support services available to students, so that they can access career-related information at their own convenience

For additional information, visit:

- RCPD Careers and Employment page: <https://www.rcpd.msu.edu/programs/careers>
- Careers Collaborative promotional video: <https://www.youtube.com/watch?v=JJD8QdbLqUU>

- **Northeastern University (NU).** NUConnect represents a collaboration between the Disability Resource Center (DRC), Co-Operative Education Program, and Career Development office. The NUConnect team meets at least tri-annually to discuss services and programming, data collection, and student and employer engagement. Services provided include: publicity of employment opportunities and events, employer-in-residences hosted at the DRC, collaborative student-focused appointments with representatives from each department as appropriate, and partnerships with national and regional programs.

Examples of recent NUConnect initiatives and programming include:

- A U.S. Secret Service campus visit, including a university-wide information session with Career Development, followed by employer-in-residence event at the DRC
- A partnership with Campus to Careers, including enrolling students in the online database and attending an employer meet-and-greet
- A logo design competition, in which students were invited to submit designs in an ongoing effort to brand and better advertise the NUConnect program
- Hosted the “Lights! Camera! Access! 2.0” event in Boston, in which students pursuing careers in media attended a presentation from a panel of professionals, and attended workshops on disclosure and career readiness
- Creation of an online calendar on the DRC website, to advertise upcoming employment events and application deadlines

For additional information, visit:

- NEU Career Services page for students with disabilities: <https://www.northeastern.edu/careers/services/job-resources-for-students-with-disabilities/>
- Campus Tap article on NUConnect initiatives: <http://thecampustap.com/career-development-students-disabilities/>

- **Rochester Institute of Technology (RIT).** Career-related support is provided through Disability Services, the Office of Career Services & Co-Operative Education, and specialist support programs at the university (e.g., the National Technical Institute for the Deaf and the Spectrum Support Program). University staff aim to reduce service redundancies through collaboration. Services and initiatives supported by the collaboration include: job skills training for students, disability training for career services staff, referral to outside resources, and recruiting and hiring tips for employers. Using a liaison model, the Assistant Director for Careers & Disabilities coordinates programming, online resources, and communication to students. Communication is facilitated by Disability Services, whose staff invite newly registered students to opt-in to notifications from the Office of Career Services & Co-Op. Career Services staff are also encouraged to adopt a universal design approach to discussing disclosure and self-advocacy in the workplace. Career counselors work with all students on strategies for addressing individual workplace needs, with the notion that every potential employee needs the skills to self-advocate in conversations with supervisors (J. Rowe, personal communication, August 30, 2018).

Examples of recent RIT initiatives and programming include:

- Neurodiverse networking events, typically hosted with employers on the evening before the university-wide career fair.
- Professional development with employers, educating them on disability etiquette, neurodiversity, and the benefits of hiring employees with disabilities
- Disability-specific career fairs, such as those coordinated by the National Institute for the Deaf.
- A “job club” or “co-op lab”, which functions like a supported study hall for students seeking support in their job search. Disability Services and Career Services staff provide support with the executive function skills required for a successful job search, such as developing organization and structure, as well as resume and cover letter feedback.

For additional information, visit:

- RIT Career Services page for students with disabilities: <https://www.rit.edu/emcs/oce/student/job-seekers-disabilities>
- RIT Career Services page to employers seeking to recruit students with disabilities: <https://www.rit.edu/emcs/oce/employer/recruiting-students-disabilities>

These models of support reflect two key themes from the career-development literature:

- 1) The effectiveness of individualized, student-centered services, and***
- 2) The importance of collaboration among stakeholders.***

- National Organization on Disability report: https://www.nod.org/wp-content/uploads/03_bridging_the_employment_gap_for_students_with_disabilities.pdf

Recommendations

These models of support reflect two key themes from the career-development literature: 1) the effectiveness of individualized, student-centered services, and 2) the importance of collaboration among stakeholders. Scott (1996) noted the defining feature of effective collaboration involves “commitment of power and resources to achieve student-centered services and support” (p.11). While the aforementioned models were designed specifically for students with disabilities, several were able to effectively provide individualized support through pre-existing services. This type of inclusive model enhances the independence of students with disabilities and underscores the importance of cross-training on disability issues (Aune & Kroeger, 1997; Burgstahler, 2001; Enright et al., 1996; Roessler et al., 2007). These models also suggest a number of recommended practices for the field.

Expand the capacity of existing resources. Disability services and career services can expand their programming to specifically address the career-development needs of students with disabilities (McAward, 2015). As Roessler et al. (2007) note, improved linkages among these offices will “increase the relevance, responsiveness, and utilization of both sets of services for students with disabilities” (p.165), leading to stronger employment outcomes.

- **Cross training.** Existing staff can design and host workshops and programs for each other (Hitchings et al., 2001). For example, disability services staff can support other offices in improving the accessibility of their programming and provide education on disability-related employment law and workplace accommodation. Career services staff can share information on career-related development issues, and resources for developing job skills (such as software programs for resume building and interview practice).
- **Disability services that include career development.** Existing disability services can be expanded to include career-related information and programming (McAward, 2015). This may begin with basic information sharing, such as adding a resources page to the office’s website with links to information about disability disclosure, workplace accommodations, and job search tools. Staff trainings may include career-related topics such as self-assessments, job assessments, and job search skills. Programming may include sessions on disclosure and workplace accommodations, peer support groups for job-seekers with disabilities, and job-skills workshops (Siperstein, 1988).
- **Career services that include students with disabilities.** Existing career services can be expanded to address the career-development needs of students with disabilities. This may begin with ensuring the accessibility of services, including promotional materials, assessment tools, and physical spaces. Career offices may also design targeted programming, such as workshops, courses, peer groups, job fairs, and work experiences that are exclusively for students with disabilities (Enright et al., 1996; Hitchings et al., 2001). Career counselors should also undergo training on disability issues such as disclosure and workplace accommodations.
- **Vocational rehabilitation services for students with intellectual disabilities.** The creation of Transition Postsecondary Programs for Students with Intellectual Disabilities (TPSIDs) has historically included partnership with vocational rehabilitation agencies. The nature of these partnerships varies, from direct service to students, to funding tuition, to serving as advisors and consultants (Grigal & Smith, 2016). To further strengthen these partnerships, university staff need to demonstrate the connection between higher education and employment, and how this path differs from traditional VR services. This could include highlighting work-study, internships, and co-op opportunities that are incorporated into the

student's academic program. It may also be beneficial to share employment outcome data with VR services to further demonstrate the value of this service (Grigal & Whaley, 2016).

Promote communication and consultation among stakeholders. The National Organization on Disability recommends use of a voluntary release form, allowing disability services to share a student's name with career services and facilitate a collaborative system of service delivery (National Organization on Disability, 2014). It may also be appropriate to include campus counseling services in these collaborations, particularly for students who are struggling with issues of identity, self-efficacy, or self-esteem related to their disability and its impact on their career development. Referrals to external resources, such as local employers, national and regional programs, or vocational rehabilitation services, may also be appropriate. Beyond making this information available to students on websites, email, and flyers, it is also helpful to host events such as meet-and-greets, drop-in hours, and employer-in-residences to facilitate student interactions.

Create new roles for staff. Consider establishing a disability liaison in the career services office (or vice versa), or creating roles for case managers whose expertise include disability and career issues (National Organization on Disability, 2014; Roessler et al., 2007). Establishing advisory boards, disability employment task forces, or other formalized teams will improve accountability and programming that drives employment outcomes.

Plan inclusive events and programming. The career services office can connect campus recruiters and employers with the disability services office. Career services and disability services can collaboratively host job fairs, employer-in-residences, and job skills workshops specifically for students with disabilities, or with the needs of these students in mind (e.g. virtual and on-campus career fairs, formal and informal networking opportunities).

Next Steps and Future Considerations

As higher education institutions, employers, and organizations develop evidence-based programming, they must do so with an eye toward systems-level change. While research and practice have historically focused on pilot programs, case studies, and collaboration, future efforts need to be grounded in data, to ensure initiatives evolve into programs that are effective, accountable, and permanent fixtures in the career development of students with disabilities. The following practices are needed for continued development of effective supports and services.

Evaluate current practices and areas of need. Higher education staff need to work together with their students, to better understand the specific needs of their populations. Students with disabilities represent a diverse group, and their career-development needs may vary by age, gender, area of disability, academic major, and other demographic factors. Programming at large research universities with strong co-op programs may look different than programming at liberal arts institutions or community colleges. Students may feel strongly supported by disability services, but less so by career services, or vice versa. Stakeholders should conduct a thorough needs assessment before committing resources to any particular initiatives or programs.

Collect outcome data. Campuses need to track data on the employment outcomes of students with disabilities. This may require voluntary release forms or disaggregated data analysis. Qualitative feedback such as surveys and focus groups can be useful for improving the day-to-day operations of the offices and programs, but quantitative and longitudinal data will make a stronger case for the resources and restructuring required of systems-level change. Stakeholders need to agree that outcome data is a shared goal, and delegate responsibilities and resources as necessary to achieve this goal.

Move beyond consultation to collaborative, team-based models. While cross-training and inclusive programming are important components of evidence-based support models, professionals can best serve students by creating offices, committees, or teams with the sole purpose of facilitating intentional, programmatic collaboration to support the employment of students with disabilities. These models may include representatives from campus disability and career services, faculty and advisors, student ambassadors, community partners such as employers and vocational rehabilitation services, and work-force supplying organizations. These models are positioned to provide wrap-around services addressing the full spectrum of career development needs, including career knowledge, work-related experience, job search skills, awareness and self-advocacy.

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