

Vocational Rehabilitation Youth Technical Assistance Center



DRIVING INNOVATION THROUGH DIVERSITY AND INCLUSION AT NASA

STEM INTERNSHIPS AND VOCATIONAL REHABILITATION PARTNERSHIPS

By Dave Brewer and Jennifer D. Clayton

INTRODUCTION

As a Vocational Rehabilitation (VR) counselor, with funding support from the Workforce Innovation and Opportunity Act (WIOA), it's important to know the essential components of a high-quality, inclusive internship program. As companies and organizations create more inclusive internship programs, VR must evaluate the accessibility of these programs, both physically and operationally. For over 50 years, NASA has provided [internship programs](#), engaging high school and college students with diverse abilities, backgrounds, and talents. This brief, along with the [three corresponding videos](#), highlights NASA's high-quality, inclusive internship programs and its partnership with VR in Texas. The brief also includes information and resources for VR professionals on how to recognize a high-quality, inclusive internship program, and how to encourage an employer to create a more accessible internship program for youth and young adults with disabilities.

NASA STEM ENGAGEMENT

On December 6, 2018, a group of high school students toured the Neutral Buoyancy Laboratory (NBL) at NASA's Johnson Space Center (JSC) in Houston, Texas. The NBL contains the world's largest indoor pool (National Aeronautics and Space Administration [NASA], n.d.-b), a 6.2

million gallon, zero-gravity simulator used to train astronauts for spacewalks (Office of Diversity and Equal Opportunity, 2018).

NBL diver, Emily, explained how these simulations promote mission successes in outer space:

Today we have two astronaut candidates in the water and the reason they train here is to familiarize themselves with how the suit feels in a zero-gravity environment. Obviously, we still have some gravity here on Earth and in the pool, but it's a really close comparison, the closest we have to what it feels like to be in space. The astronauts' trainers are in there and you can hear them over the communications loop. (Insights International Inc., Partnering to build diversity, 2019b)

Throughout the day, students interacted with NASA staff and interns, participated in hands-on science, technology, engineering, and mathematics (STEM) activities, and experimented with NASA hardware and software. Students also learned about NASA's inclusive internships, [Schedule A hiring](#), and employee resource groups (Insights International Inc., Partnering to build diversity, 2019b).



The student tour and info session was a collaborative effort between Texas Workforce Solutions Vocational Rehabilitation Services (TWSVRS) and NASA's JSC. Representatives from NASA's High School Aerospace Scholars program, NASA's Pathways Program, and JSC's No Boundaries Employee Resource Group also spoke at the event (Office of Diversity and Equal Opportunity, 2018). Partnerships between these groups help JSC develop an inclusive talent pipeline of qualified candidates, and help TWSVRS connect students and youth with disabilities to work-based learning experiences and potential employment opportunities.

JSC PARTNERSHIPS WITH VOCATIONAL REHABILITATION SERVICES

Tracy Minish, JSC's Mission Control Center Operations Manager, co-leads the No Boundaries Employee Resource Group and is legally blind. His involvement with TWSVRS began when he needed tools to help him with reasonable accommodations at work.

The tools and assistive technology that Tracy received helped improve his productivity. Inspired by his experience and wanting to give back, he has been partnering with and providing outreach through TWSVRS for over 20 years (Insights International Inc., Finding and hiring problem-solvers, 2019a).

Tracy works closely with JSC's Disability Program Manager (DPM), Tu-Quynh Bui. As the DPM, Tu-Quynh manages JSC's Schedule A hiring process for individuals with disabilities, helps interns and employees through the reasonable accommodations process, and provides accessibility training and technical assistance to JSC managers and employees. She sends every JSC job opening to TWSVRS and helps coordinate events like the NBL tour and job fairs with the TWSVRS Business Relations unit (T. Bui, personal conversation, September 6, 2018).

The TWSVRS Business Relations unit provides customized technical assistance and consultative services to employers regarding disability awareness and

education, worksite and job process assessments, hiring and retention assistance, and assistance with federal requirements and incentives (Texas Workforce Solutions, 2018). Kimberly King, VR Business Relations Coordinator (personal conversation, December 6, 2018), says that partnerships and events with employers like NASA help raise awareness of what's possible for students with disabilities:

By having our students come in and listen to a young lady who is in the internship program, it allows them to see what's possible. Not every student will be involved in a NASA internship but perhaps one day what this will lead to is the love of science and maybe a different career field.

According to NASA's Careers webpage (2019a), NASA consists of "scientists, engineers, IT specialists, human resources specialists, accountants, writers, technicians and many other kinds of people working together to break barriers to achieve the seemingly impossible" (para.1). To this end, JSC relies on partnerships and events with organizations like TWSVRS to nurture and identify highly qualified candidates with diverse backgrounds and skill sets to advance NASA's mission.

DEVELOPING A TALENT PIPELINE AT NASA

At NASA, "Diversity and inclusion drive workplace creativity, innovation, and mission success" (Office of Diversity and Equal Opportunity, 2018, para. 6). In the 1960s, when John F. Kennedy announced a national goal of landing a man on the moon by the end of the decade, NASA teamed up with the U.S. Naval School of Aviation Medicine and 11 men from Gallaudet College (now University) to study the effects of gravitational changes on the human body (Jones, 2018).

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All but one of the so-called Gallaudet 11 had lost their hearing at an early age due to spinal meningitis (making them immune to motion sickness), so their participation was key to understanding how the human body responds to being in a zero-gravity environment (Jones, 2018):

Some of the tests the Gallaudet 11 participated in included rides aboard the notorious "Vomit Comet" aircraft, spending 12 days straight inside a 20-foot slow-rotation room and a trip to Nova Scotia in a round-bottom boat during a very intense storm, where the hearing members of the experiment became so ill they were not able to complete the experiment. (Jones, 2018, para. 4)

The contributions of the Gallaudet 11 informed designs that would enable the first Americans to go to space and that are still being used today, nearly 60 years later (Jones, 2018).

In the Gallaudet 11 example, diversity of human experience drove innovation. Now, NASA drives innovation through a talent pipeline that supports and values diversity of thought, including the thoughts of individuals with disabilities. NASA recruits and supports employees with disabilities through inclusive student and youth internships, Schedule A hiring, and employee resource groups.

INCLUSIVE INTERNSHIPS AT NASA

Amy Quartaro, a former NASA intern, spoke at the NBL student tour and info session. Amy became legally deaf in 2014. Her passion for robots led to her participation in the For Inspiration and Recognition of Science and Technology (FIRST®) robotics program. Today, Amy serves as a FIRST program mentor (NASA, 2017). Amy's career exploration with FIRST led to her interest in building career development skills at NASA.

K-12 STEM ENGAGEMENT

FIRST (see Figure 1 on page 5) is a not-for-profit that builds STEM skills and 21st century work and life skills such as self-confidence, communication, and leadership through accessible, mentor-based STEM engagement programs (FIRST, n.d.-b). FIRST has four programs available to students in grades K-12 (FIRST, n.d.-a).

NASA AEROSPACE SCHOLARS

In her junior year of high school, Amy participated in the NASA Aerospace Scholars program (NASA, 2017). There are three entryways for students in the NASA

Aerospace Scholars program: the Middle School Aerospace Scholars (MAS) program, the High School Aerospace Scholars (HAS) program, and the NASA Community College Aerospace Scholars (NCAS) program (NASA, n.d.-a). During the school year, students in the HAS program complete an online course with interactive lessons on NASA activities related to Space Exploration, Earth Science, Technology, Mathematics, and Aeronautics. They also complete design challenges and hold virtual chats with NASA engineers and scientists. The program culminates in a six-day residential summer experience at NASA's JSC. In 2019, selected participants worked with NASA scientists and engineers to plan a mission to Mars (NASA, n.d.-d).

Trinesha Dixon is the Activity Lead for STEM engagement activities at JSC's Office of STEM Engagement. She works with NASA's mission directors, as well as secondary and postsecondary schools, to identify opportunities for students to use STEM to solve real-world aerospace problems. For example, last year, students from NCAS designed a zip tie cutter for use in the International Space Station.



Figure 1. FIRST® STEM engagement programs for grades K-12 and ages 6-18 (developed from information available online at <https://www.firstinspires.org>).

Program	Grades	Ages	Description	Mentors
FIRST® LEGO® League Jr.	K-4	6-10	Teams of up to six students explore a real-world scientific concept, build a motorized model, and develop a poster to illustrate their journey of discovery.	Adult coaches provide guidance and inspiration.
FIRST® LEGO® League	4-8	9-14	Teams of up to 10 students design, build, and program robots to perform autonomous missions on a playing field.	Adult coaches provide guidance.
FIRST® Tech Challenge	7-12	12-18	Teams of 10 or more students design, build, program, and operate robots to play a floor game against other teams. Scholarship opportunities are available to participants.	Adult mentors and coaches provide guidance.
FIRST® Robotics Competition	9-12	14-18	Under strict rules, teams of 25 or more students build and program robots to perform challenging tasks against a field of competitors. They must also raise funds, design a team brand, hone teamwork skills, and perform community outreach. Scholarship opportunities are available to participants.	Volunteer mentors include engineers, teachers, business professionals, parents, and alumni.

NASA INTERNSHIPS

There are many possible entry points into a STEM-related career pathway. NASA's Office of Education offers internship, fellowship, and scholarship opportunities for high school, undergraduate, or graduate students and educators (NASA, 2019c). NASA internships are an integral part of NASA's talent pipeline strategy. Interns are matched with career professionals who serve as mentors on projects that contribute to the operation of a NASA facility and/or the advancement of a NASA mission (NASA, 2019b).

Amy Quartaro obtained a NASA engineering internship in her junior year at the University of Texas at Austin. During her internship, she helped design and manufacture parts for rapid prototyping of robotic hardware and software at NASA's Langley Research Center in Hampton, Virginia (NASA, 2017). There she worked with commercial researchers conducting risk reduction studies for the In-Space Robotic Manufacturing and Assembly (IRMA) project (NASA, 2017). This will enable more frequent science and discovery missions in Earth's orbit, across the solar system, and beyond (NASA, 2018b).

Amy also worked on the Commercial Infrastructure for Robotic Assembly and Servicing (CIRAS) project, which uses robots such as NASA's Tension Actuated Long-reach In-Space Manipulator (TALISMAN) to assemble flight hardware in space (National Aeronautics and Space Administration, 2017). Projects like CIRAS are expected to reduce the costs and potential human hazards associated with in-space manufacturing and assembly traditionally done by astronauts during spacewalks (NASA, 2017). For Amy, the TALISMAN demonstration was her most memorable moment during her time at Langley (NASA, 2017).

The practical demonstrations using TALISMAN and other robotic technologies were definitely a high point. While it was happening, I was the only person allowed on the floor to do the supervision checks of all our autonomy points. Beyond that area was a sizeable audience, all watching... and I was alone on the floor, staring at my robot! It was surreal and exhilarating. (NASA, 2017, para. 11)

NASA PATHWAYS PROGRAM

Now, Amy is a NASA Pathways intern. NASA's Pathways Program (see Figure 2 on page 7) is another career pathway to federal employment. NASA develops and recruits talent through three pipelines within the Pathways Program: the NASA Pathways Intern Employment Program (IEP), the NASA Pathways Recent Graduates Program (RGP), and the NASA Pathways Presidential Management Fellows (PMF) Program. Those who successfully complete a Pathways intern appointment may be converted to permanent employment with NASA or term employment of up to six years (NASA, 2019c).

The NASA Pathways IEP is open to students and individuals accepted for enrollment in qualifying educational programs. IEP interns may be appointed to work and explore NASA careers for indefinite periods without established ending dates or for durations of up to one year. The NASA Pathways RGP is a dynamic, year-long career development program for individuals who have recently graduated from qualifying educational institutions. The NASA Pathways PMF program provides employment opportunities for individuals who have received qualifying master's, doctorate, or professional degrees within the last two years (NASA, 2019c).

Figure 2. NASA Pathways programs for students, recent graduates, and professionals (developed from information available online at <https://www.nasa.gov/careers/pathways-program> and <https://www.pmf.gov/become-a-pmf/overview.aspx>).

Program	Eligibility	Duration	Description
NASA Pathways Intern Employment Program (IEP)	U.S. citizens, aged 16 or older, who are enrolled or accepted for enrollment on at least a half-time basis, are pursuing a degree or certificate, have a 2.9 grade point average (GPA), and are able to complete 640 hours of work prior to completing degree/certificate requirements; some positions require the student to be pursuing specific majors.	Indefinite, or up to one year	Current students and individuals accepted for enrollment in qualifying educational programs complete 640 hours of work and explore NASA careers while still in school.
NASA Pathways Recent Graduate Program (RGP)	U.S. citizens within two years of completing a degree or certificate at a qualifying educational institution, or veterans within two years after release or discharge from active duty, up to six years after earning a degree or certificate at a qualifying educational institution.	One year	Individuals who have recently graduated from qualifying educational institutions participate in a dynamic career development program at the beginning of their careers.
NASA Pathways Presidential Management Fellows (PMF) Program	Individuals who have received a qualifying master's, doctorate, or professional degree within the last two years.	Two years	Participants work in 1-2 federal agencies in a leadership development program that includes 160 hours of formal interactive training on leadership, management, policy, and other topics, and a 4-6 month developmental assignment.



According to Jonathan Abary, Pathways Program Manager at JSC, the Pathways intern program is JSC's primary mechanism for full-time, entry-level hiring. About 50% of JSC's annual hiring comes from the Pathways intern program. Over 95% of internship completers are offered a position with JSC, and 95% of these offers are accepted. To Abary, "It really has proven to be a valuable design in the way that we've structured our hiring strategy for the entry level that is providing us access to the next generation of talent" (Insights International Inc., Partnering to build diversity, 2019b).

Jonathan Abary manages the Pathways internship program's recruitment, selection, supervision, mentoring, and evaluation processes. He also visits college campuses to partner with schools and recruit students. Additionally, former interns run a committee called NASA On Campus, allowing them to speak to students and potential interns about internship opportunities with NASA (J. Abary, personal communication, December 4, 2018).

NASA's Pathways interns, also called Pathways co-ops, are paid employees (Insights International Inc., Finding and hiring problem-solvers, 2019a). The internship also counts toward the intern/employee's years of service and retirement (T. Minish, personal communication, December 7, 2018), and it accommodates interns' academic schedules. Amy Quartaro is considered a full-time NASA employee, but her work schedule alternates with her school schedule. Within a co-op rotation, she attends school for six months, and works at JSC for six months. With only two semesters to her Bachelor's in Aerospace Engineering, Amy was on her third Pathways co-op rotation (Insights International Inc., Amy's internship, 2019c).

JSC interns are matched with an internship supervisor based on their interests and skill sets, as well as the business needs of JSC. Interns select the projects they want to work on, and their supervisors direct and supervise their work. In JSC's Advanced

Exercise Development Lab, Amy and her lab partners developed a virtual reality game to help astronauts stay healthy and fit in space. The simulations included functional exercises based on real-life situations that could occur during space missions, such as needing to duck in order to avoid being hit by a projectile (Insights International Inc., Amy's internship, 2019c).

Interns are also matched with a mentor. According to Maddy Vandewalle, a mechanical engineer with NASA, the mentor is a more informal guide who serves as a role model, helps interns navigate the work environment and culture, and provides coaching and support for things like how to approach difficult conversations with their supervisor (personal communication, December 4, 2018).

Amy Quartaro worked with Maddy Vandewalle in the Structures Test Lab, where she built a radiation sensor plate, a piece of safety-related flight hardware that is used on the Orion spacecraft. Amy's sensor plate launched on SpaceX CRS-16 (Insights International Inc., Amy's internship, 2019c), a cargo resupply mission to the International Space Station that delivered over 5,600 pounds of science and research, crew supplies, and vehicle hardware in December 2018 (NASA, n.d.-c).

Maddy is a NASA Pathways internship alumna. Her mentor is also still with JSC (Insights International Inc., Amy's internship, 2019c). When three generations of interns exist under the same employer, interns get a first-hand example of how their internships can lead to successful careers. For NASA, it also produces continuity and aids in retention and succession planning.

For interns with disabilities, Pathways internships also provide a low-risk environment for practicing disclosure and self-advocacy. When Amy worked with the

Mission Planning Operations team of JSC's Flight Operations Directorate, supervisor Mike Boggs welcomed the information about how she worked and learned best:

I didn't know that she had a disability until we had that first one-on-one meet, and so, it was important for her to communicate to me that she reads my lips, and so, if I'm communicating with her, I needed to, you know, be head-on and be able to have my lips visible. (Insights International Inc., Amy's internship, 2019c)

Due to her passion for analysis, Amy was tasked with troubleshooting scheduling issues that affected everyone from astronauts on the space station, to the mission planning and operations team. When she first started working with Mike, they found that if she turned the volume all the way up, she could use the headset that the flight controllers used. By 2017, her hearing had declined to the point of needing a cochlear implant. The solutions Amy designed for the project are still used on console over a year later (Insights International Inc., Amy's internship, 2019c).

In addition to engineering, critical thinking, and self-advocacy, Amy's internship also provided hands-on experience with other 21st century skills such as collaboration, communication, information literacy, and leadership. After researching and designing a hatch for a Mars concept vehicle, she presented her design via telecon to all stakeholders involved with the project. Due to her academic and internship achievements, Amy is now being recruited for graduate school and fellowships. Her supervisor for the hatch project, Oscar Guzman, provided praise and encouragement: "Yeah, she'll be my boss one day" (Insights International Inc., Amy's internship, 2019c).



SCHEDULE A HIRING

While inclusive internships are one pathway to a career with NASA, individuals with disabilities, including youth with disabilities, can also enter into federal employment through the Schedule A hiring process. Youth with disabilities can apply for Schedule A hiring at JSC with or without participating in a NASA internship. At the NBL student tour and info session, Sabrina Parras, Business Development Officer with TWSVRS, spoke with visiting students about Schedule A hiring (Insights International Inc., Partnering to build diversity, 2019b).

According to the U.S. Equal Employment Opportunity Commission (n.d.), while most hiring in the federal government occurs through a structured competitive process open to all applicants, Schedule A hiring provides an expedited hiring process to individuals with disabilities. In some instances, federal agencies may select solely from a list of qualified Schedule

A applicants, rather than from the list of all applicants (U.S. Equal Employment Opportunity Commission, n.d.). Not all federal agencies use Schedule A hiring, but those that don't may have other procedures to streamline hiring of individuals with disabilities (U.S. Equal Employment Opportunity Commission, n.d.).

The traditional hiring process results in what is called "competitive service." The Schedule A hiring process, often referred to as "non-competitive appointment," results in what is called "excepted service." As outlined by the U.S. Equal Employment Opportunity Commission (n.d.), an individual in excepted service can be converted to competitive service after completing two or more years of satisfactory service under a non-temporary Schedule A appointment without a break of more than 30 days. The individual must be recommended for conversion by his or her supervisor, meet all requirements and conditions governing career and career-conditional appointment

(other than those for competitive selection), and be converted without a break in service of one day (U.S. Equal Employment Opportunity Commission, n.d.).

Youth with an intellectual disability, a severe physical disability, or a psychiatric disability may apply for federal employment through the Schedule A process. To use this process, the individual must obtain “Proof of Disability Documentation,” also called a “Schedule A letter,” from a doctor, licensed medical professional, licensed rehabilitation professional, or any federal, state, District of Columbia, or U.S. territory agency that issues or provides disability benefits (U.S. Equal Employment Opportunity Commission, n.d.). With the Schedule A letter in hand, the individual applies to the job posting on the USAJOBS website or the specific federal agency’s website, then also applies directly with the agency using the Schedule A process.

When contacting the agency directly, applicants should ask for the Disability Program Manager (DPM), Selective Placement Program Coordinator (SPPC), or human resources (HR) specialist listed in the job ad (U.S. Equal Employment Opportunity Commission, n.d.). The DPM, SPPC, or HR specialist then helps the applicant navigate the agency’s process and makes sure its application is considered for the position (U.S. Equal Employment Opportunity Commission, n.d.).

Once the applicant is offered an interview, the applicant can speak with the same point of contact about any necessary accommodations needed for the interview (U.S. Equal Employment Opportunity Commission, n.d.). The Schedule A point of contact can also field job accommodation requests by the applicant after a position is offered (U.S. Equal Employment Opportunity Commission, n.d.).

NASA’s employee resource groups (ERGs) are voluntary, employee-led groups that not only help provide a sense of connection and belonging, but they also support professional development, provide advocacy, and help advance the agency’s mission and goals.

Due to the long-standing relationship between JSC and TWSVRS, VR professionals have a direct line to JSC’s DPM, Tu-Quynh Bui, and JSC has direct access to a pool of potential Schedule A applicants. JSC can keep TWSVRS abreast of the individual’s business needs and talent goals, and TWSVRS can provide pre-employment transition and VR services specifically tailored toward known career opportunities in the local labor market.

EMPLOYEE RESOURCE GROUPS

While JSC’s talent pipeline draws from both inclusive internships and Schedule A hiring, supporting current talent throughout their employment is of equal importance. This support comes from the DPM, whose role is to recruit, hire, and accommodate persons with disabilities; from all managers and supervisors, who receive training on accessibility; and from fellow NASA employees. NASA’s employee resource groups (ERGs) are voluntary, employee-led groups that not only help provide a sense of connection and belonging, but they also support professional development, provide advocacy, and help advance the agency’s mission and goals (NASA, 2018a).

NASA has multiple ERGs for various constituent groups. The No Boundaries (NoBo) ERG, which Tracy Minish co-leads, is for JSC employees with disabilities, and employees who are caregivers of family members with disabilities. NoBo and TWSVRS share goals of “supporting and strengthening recruitment, onboarding, retention, and workplace satisfaction of persons with disabilities” (Jones, 2018, para. 9). In addition to advocacy, education, and support, intended benefits to the JSC community include facilitation of a working environment accessible to and inclusive of all abilities, improved safety, resources for productivity and effectiveness, and “a better place to work for the entire JSC workforce” (Jones, 2018, para. 9). For NASA and its partners, it’s about inclusion and innovation with the goal of closing the gap for youth and young adults with disabilities in the STEM fields.

CLOSING THE GAP FOR YOUTH AND YOUNG ADULTS WITH DISABILITIES IN STEM

Internships can lead to high paying careers in science, technology, engineering and mathematics (STEM) – with a caveat. Gottfried, Bozick, Rose, & Moore (2016) examined nationally representative data of 9,000 students with and without disabilities to determine if Career and Technical Education experiences in high school (including internships) increase the chances of selecting a STEM-related course of study in higher education. They found students in the general population who engaged in internships were more likely to select a STEM-related major in higher education. They also found that students who reached advanced levels of mathematics coursework were 75% more likely to pursue STEM-related careers. However, the authors found that students with disabilities tended to take advanced math coursework at a lower rate than their peers in the general population.

Given that math is a ‘gateway’ to advanced courses in other STEM subjects, it is clear that the students with disabilities were not developing the foundational knowledge and skills to access and succeed in above average or advanced STEM courses. (p. 242)

Many STEM-related careers build on foundational skills in math and science. Therefore, high academic expectations and high-quality academic support should begin in the primary years of education, and continued through high school, for internships to lead to many STEM-related fields. VR, partnering with secondary schools and institutes of higher education, can be the agency that connects and encourages youth and young adults with disabilities to pursue STEM opportunities through pre-employment transition services and inclusive internship programs, such as those at NASA.

WHAT ARE THE KEY COMPONENTS OF A HIGH-QUALITY, INCLUSIVE INTERNSHIP?

For a STEM internship program, or any internship program, it’s important to know the key components of a high-quality, inclusive internship program. The National Consortium on Leadership and Disability/ Youth defined “internship” as follows:

Internships are based in experiential learning, meaning they provide opportunities to learn by actually completing specific tasks. There is generally an emphasis on reflection, or thoroughly thinking through what has been gained and learned. Internships are intended to provide the intern with hands-on professional experience in an occupational career field he or she is considering. (p.1)

Internships are hands-on learning experiences. The intern learns about a career by performing an actual job, alongside other employees. Through this participation, the intern also considers areas of interest and career development: “Do I want to do this type of work? What more do I need to learn?” The regional [ADA Center](#) can help VR professionals get started in evaluating the extent to which a place of employment meets the following criteria for inclusion:

- Interior and exterior spaces, including bathrooms, hallways, meeting rooms, entryways, break rooms, doorways, and sidewalks, should be accessible to everyone. For example, is the employer’s space accessible (e.g., accessible doors and furniture)?

- Recruitment practices should entice the deepest pool of interns with diverse talents and abilities. For example, is the employer’s website completely accessible, and does it present images of diverse employees?
- Accommodations and assistive technology should be readily available. For example, how will the interns request reasonable accommodations and obtain the proper technology to get their work done efficiently and effectively?

To assist VR professionals in evaluating current and future internship programs, the checklist on page 14 shares the essential components to consider when partnering with an employer’s internship program (adapted from [Inclusive Internship Programs: A How-To Guide For Employers](#)).

Recommendation	Description
Establish a Relationship with an Internship Manager	<ul style="list-style-type: none"> □ Ensure that policies and practices support an inclusive workplace □ Manage intern application and placement processes, including accommodations as requested □ Train intern supervisors and mentors □ Troubleshoot disagreements between interns and other employees □ Implement the evaluation process for interns, mentors, and the program as a whole □ Develop/maintain relationships with education, workforce development, and other partners □ Keep leadership updated on internship program development
Analyze Employer Mission and Goals	<ul style="list-style-type: none"> □ Clarify the purposes and mission of the internship program, including inclusive language, overall □ Create goals to provide measurable actions for program implementation and evaluation □ Identify areas in the workplace where interns would be best utilized
Know Employer Roles and Responsibilities	<ul style="list-style-type: none"> □ Human Resources provides interns an onboarding/ orientation, including a confidential means to request workplace accommodations □ Manager assigns a non-supervisory mentor, providing the intern opportunities to share concerns, and learn the ins and outs of the workplace □ Human Resources assesses (with the intern) each intern's work space, providing the accommodations, tools, and resources necessary for task completion □ The intern, mentor, and supervisor develop a plan that includes work assignments and learning objectives □ Supervisors and mentors meet with interns at regular intervals to provide feedback and support

Recommendation	Description
Understand Budget	<ul style="list-style-type: none"> □ Create an internship program budget that includes workplace accommodations, transportation, evaluation processes, and time that employees spend in meetings □ Consider paid vs. unpaid interns — does the intern provide value, and should that value be compensated? Understand your state and U.S. Department of Labor laws, regulations and guidance
Promote Inclusion to Employer	<ul style="list-style-type: none"> □ Share how VR can be a part of the recruitment process that locates interns with diverse talents and abilities □ Encourage employers to support co-workers and supervisors to include interns in meetings, collaborative projects, and informal get-togethers □ Promote to the employer that their websites and tools are regularly assessed for accessibility

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- Texas Workforce Solutions. (2018). Vocational Rehabilitation - Business Relations. Retrieved from <https://twc.texas.gov/businesses/vocational-rehabilitation-business-relations>.
- U.S. Equal Employment Opportunity Commission. (n.d.). The ABCs of schedule A: Tips for applicants with disabilities on getting federal jobs. Retrieved from https://www.eeoc.gov/eeoc/publications/abc_applicants_with_disabilities.cfm.
- Workforce Innovation and Opportunity Act (WIOA), 29 U.S.C 3101, (2014).

RESOURCES

Business and Employer Accessibility Services

[ADA National Network Business \(website\)](#)

ADA National Network, n.d.

The ADA National Network provides information, guidance, and training on the Americans with Disabilities Act. The business page contains information about accessibility-related events, frequently asked questions, fact sheets, projects, and research.

[Tax Benefits for Businesses Who Have Employees with Disabilities \(website\)](#)

U.S. Internal Revenue Service, 2019

The IRS website contains information about tax credits and deductions for businesses accommodating people with disabilities. This page introduces the Disabled Access Credit, Barrier Removal Tax Deduction, and Work Opportunity Tax Credit. Includes links to official IRS forms and publications.

[Texas Workforce Commission Vocational Rehabilitation Business Relations \(website\)](#)

Texas Workforce Commission, n.d.

Contains information about vocational rehabilitation services available to Texas businesses and employers, such as disability awareness and education; worksite and job process assessments; hiring and retention assistance; and federal requirements and financial incentives assistance.

Employee Resource Groups Resources

[Employee Resource Groups \(website\)](#)

Employer Assistance and Resource Network on Disability Inclusion, 2019

An introduction to employee resource groups (ERGs), also known as employee networks, and affinity groups. Includes a link to an ERG Toolkit, and the publication, Fostering Disability-Inclusive Workplaces Through Employee Resource Groups.

[NASA Employee Resources \(website\)](#)

National Aeronautics and Space Administration, 2018

Contains information about NASA's employee resources, including NASA's commitment to diversity and inclusion, and the employee programs that support mission success. Includes information about special emphasis programs, employee resource groups, special observance programs, and advisory councils.

[NASA HQ Employee Resource Groups \(website\)](#)

National Aeronautics and Space Administration, 2019

Links to NASA headquarters employee resource groups. Links include information, events, and contact information for each group.

Federal Employment Resources

[The ABCs of Schedule A: Tips for Applicants with Disabilities on Getting Federal Jobs \(website\)](#)

U.S. Equal Employment Opportunity Commission, n.d.

An introduction to the Schedule A hiring authority for individuals with disabilities. Contains information about the Schedule A hiring process for individuals with disabilities, including general information, a step-by-step process, and frequently asked questions.

[USA Jobs Federal Application Process \(website\)](#)

U.S. Office of Personnel Management, n.d.

The USA Jobs website is the official jobs website for the U.S. government. The Federal Application Process page provides an overview of the federal hiring process used to ensure applicants receive fair and equal opportunity. Contains links to explore hiring paths for different groups, including individuals with disabilities.

Internship Resources

[Fact Sheet #71: Internship Programs Under the Fair Labor Standards Act \(publication\)](#)

U.S. Department of Labor, 2018

Fact sheet from the U.S. Department of Labor that provides general information to help determine whether interns and students working for “for-profit” employers are entitled to minimum wages and overtime pay under the Fair Labor Standards Act (FLSA). Includes background information and a seven-factor test for unpaid interns and students.

[Inclusive Internship Programs: A How-to Guide for Employers \(publication\)](#)

Office of Disability Employment Policy, U.S. Department of Labor, n.d.

Publication that outlines the importance of establishing internship programs for young adults, the benefits of internship programs, steps to developing an inclusive internship program, and the process of implementing and evaluating an internship program from beginning to end. Includes sample forms and templates.

[Internships: The On-Ramp to Employment: A Guide for Students with Disabilities to Getting and Making the Most of an Internship \(publication\)](#)

National Consortium on Leadership and Disability for Youth, 2010

An internship guide for youth that covers topics from exploring career options, to selecting an internship, applying, determining whether to accept an internship, resource mapping, skills for success, and personal assistance services. Also includes resources and publications.

[NASA Internships and Fellowships \(website\)](#)

National Aeronautics and Space Administration, 2019

The NASA internships and fellowships page contains information about NASA internships and fellowships, including the Pathways internship program, and international internships. Intern projects and stories are also featured.

[NASA Pathways Intern Employment Program \(IEP\) \(website\)](#)

National Aeronautics and Space Administration, n.d.

The NASA pathways intern employment program website contains information about eligibility and internship opportunities

NASA Resources

[Johnson Space Center \(website\)](#)

National Aeronautics and Space Administration, 2019

NASA’s Johnson Space Center website contains information, images, videos, and media resources related to Johnson Space Center in Houston, Texas. Johnson Space Center is home to the nation’s astronaut corps, the International Space Station mission operations, and the Orion program.

[NASA \(website\)](#)

National Aeronautics and Space Administration, 2019

The National Aeronautics and Space Administration website contains information about NASA missions, history, space exploration topics, STEM engagement activities, internships, and careers.

[NASA Careers \(website\)](#)

National Aeronautics and Space Administration, 2019

The NASA careers website contains information about NASA careers and how to apply.

[NASA Office of Diversity and Equal Opportunity \(blog\)](#)

National Aeronautics and Space Administration, n.d.

Official NASA blog featuring articles related to diversity and inclusion.

[NASA Reasonable Accommodations \(website\)](#)

National Aeronautics and Space Administration, 2019

Information about reasonable accommodations for individuals with disabilities at NASA. Contains a link to NASA's reasonable accommodation process.

STEM Resources

[FIRST \(website\)](#)

For Inspiration and Recognition of Science and Technology, n.d.

Official website for FIRST, a youth-serving non-profit STEM engagement program for students in K-12. Includes information for parents, students, educators, and volunteers about the FIRST LEGO League Jr., FIRST LEGO League, FIRST Tech Challenge, and FIRST Robotics Competition programs.

[Johnson Space Center's STEM Opportunities for Students \(website\)](#)

National Aeronautics and Space Administration, 2019

Johnson Space Center's STEM engagement website contains information about K-16 experiential learning opportunities and STEM challenges. These activities are designed to increase students' interest and involvement in STEM, improve their ability to participate in STEM studies and careers, and enhance their understanding of the value of STEM in their lives while engaging them in NASA's mission. Includes student opportunities and a link to research, team competitions, professional development, design challenges, and more.

[NASA Aerospace Scholars Program \(website\)](#)

National Aeronautics and Space Administration, n.d.

Contains general information, eligibility, and application information for the NASA High School Aerospace Scholars (HAS), NASA Middle School Aerospace Scholars (MAS), and NASA Community College Aerospace Scholars (NCAS) programs.

[NASA STEM Engagement \(website\)](#)

National Aeronautics and Space Administration, 2019

NASA's STEM engagement website contains information about NASA's STEM engagement programs, including opportunities for educators and students, meeting and speaker requests, and featured projects/stories.

[Space Center Houston Education Programs \(website\)](#)

Space Center Houston, n.d.

Space Center Houston's education programs website features educational programs, events, and exhibits at Space Center Houston's Learning Innovation Center in Houston, Texas. Programs are based on national science standards and focus on science, technology, engineering, and math, to help adults and children think critically; learn about the past, present, and future of America's space flight program; and build a greater understanding of the world.

Talent Pipelining Resources

[U.S. Chamber of Commerce Foundation Talent Pipeline Management Initiative \(website\)](#)

U.S. Chamber of Commerce Foundation, n.d.

Information about the U.S. Chamber of Commerce Talent Pipeline Management (TPM) initiative, a demand-driven, employer-led approach to close the skills gap that builds pipelines of talent aligned to dynamic business needs. Contains information about the initiative, case studies, publications, videos, and a TPM academy. Publications include an implementation guide for building a talent pipeline.

Transition to Adulthood Resources

[Guideposts 2.0](#) (publication)

National Collaborative on Workforce and Disability for Youth, 2019

“What do all youth need to make a successful transition to adulthood?” This is the central question that the Guideposts for Success is designed to answer. Two characteristics set the Guideposts for Success apart from other frameworks and resources pertaining to youth transition. First, it recognizes that youth in the transition-to-adulthood age group (defined as ages 12 to 25) benefit from many of the same opportunities, services, and supports, regardless of their disability status and other individual differences. Second, it explicitly identifies additional opportunities, services, and supports that may be required or beneficial for youth who have disabilities. In this way, the Guideposts for Success serves as a guiding resource for ensuring that all youth, including those with disabilities, have full access to high-quality services in integrated settings to gain education, employment, and independent living.

Texas Workforce and Vocational Rehabilitation Resources

[Texas Workforce Commission \(website\)](#)

Texas Workforce Commission, n.d.

The Texas Workforce Commission website contains resources, tips, and tools to build a stronger Texas workforce. For Texas job seekers and employees; businesses and employers; community and workforce partners; and students, parents, and educators.

[Texas Workforce Commission Vocational Rehabilitation Services \(website\)](#)

Texas Workforce Commission, n.d.

Contains information about vocational rehabilitation services available to Texas students, youth, and adults with disabilities.

ACRONYMS

CIRAS	Commercial Infrastructure for Robotic Assembly and Servicing	NCAS	NASA Community College Aerospace Scholars
DPM	Disability Program Manager	n.d.	No Date
ERG	Employee Resource Group	NoBo	No Boundaries
FIRST	For Inspiration and Recognition of Science and Technology	PMF	Presidential Management Fellows
GPA	Grade Point Average	RGP	Recent Graduates Program
HAS	High School Aerospace Scholars	SPPC	Selective Placement Program Coordinator
HR	Human Resources	STEM	Science, Technology, Engineering, and Mathematics
IEP	Intern Employment Program	TALISMAN	Tension Actuated Long-reach In-Space Manipulator
IRMA	In-Space Robotic Manufacturing and Assembly	TWSVRS	Texas Workforce Solutions Vocational Rehabilitation Services
JSC	Johnson Space Center	VRBR	Vocational Rehabilitation Business Relations
MAS	Middle School Aerospace Scholars		
NASA	National Aeronautics and Space Administration		
NBL	Neutral Buoyancy Laboratory		

This brief was written by Dave Brewer, independent media producer and consultant, and Jennifer D. Clayton, workforce consultant.

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4301 Connecticut Ave. NW, Suite 100, Washington, D.C. 20008
202-822-8405 | www.iel.org | iel@iel.org