

Needs Assessment Cover Sheet

Project Title

Improving Access to Technological Education Programs and Careers for Community College Students with Learning Disabilities

Assessment Staff and Roles

Name, Role

Name, Role

Name, Role

Type of Organization

Community college

Industry and regional technology representatives

Work placement organizations

Primary Contact(s)

Name

College

Mailing address 1

Mailing address 2

Mailing address 3

Work Phone

Email Address

Name

College

Mailing address 1

Mailing address 2

Mailing address 3

Work Phone

Email Address

Dates of Assessment

Month, day, year – Month, day, year

Date of Assessment Review

Month, day, year

Roles

Needs assessment interviews are designed to develop a representative understanding of the goals, functions, and challenges faced in the system of interest. In order to provide adequate coverage to develop a better understanding of an institution's ability to provide services to students with learning differences, interviews are conducted with multiple interviewees who serve different roles in the institutions. The following high-level roles have been identified for the interview process:

Interviews

College

- Disability Service Providers
 - Full- and part-time Disability Services Staff
 - Specialized Providers (assistive technology specialists, peer tutors, coaches, psycho-educational assessment staff, counselors, disability mentors and learning specialists)
- Instructional Personnel
 - Full-time Faculty (program-specific and prerequisite courses)
 - Part-time/Adjunct Faculty (program-specific and prerequisite courses)
 - Learning support specialists not affiliated with Disability Services (mentors, tutors)
- Students
 - Students in technology education programs who are receiving disability services
 - Students in technology education programs who are not receiving disability services
 - Students (with and without disabilities) who have graduated technology education programs
 - Students (with and without disabilities) who have left technology education programs to pursue another program
 - Students (with and without disabilities) who are new to the college and plan to pursue a technology education program
- Administrative Staff
 - High-level Administrators
 - Technology Education Program Administrators
 - Admissions Representative
 - Resource Personnel (Library, instructional design, learning center, technology lab staff, career services office)
 - Counseling Staff (psychiatric, career, transitions)
 - Continuing Education and Online Education staff

Community

- Employers
 - Human Resources representatives
 - Employee Assistance Program personnel
 - Mid-level managers/supervisors
 - Internship/co-op coordinators
 - Hiring and placement managers
- Employees
 - Recent graduates of college technology education programs

- Employees who have taken Continuing Education courses
- Current/recent interns
- Temporary/contract workers
- Community Service Organizations (Vocational Rehabilitation, Employment Specialists, Career Services, Transitions Support Groups, Workforce Investment Board)
 - Directors, administrators
 - Counselors/Coordinators

Observations

College

- Prerequisite Course Classrooms
- Technology Education Program Classrooms
- Technology Education Program Labs/Hands-on Component
- Evaluation of Campus Environment and Classroom Infrastructure (accessibility)
- Evaluation of Campus Technology and Digital Infrastructure (usability)

Community

- Work environment
- Resources, documentation, and other work-related supports
- Evaluation of Workplace Environment and Classroom Infrastructure (accessibility)
- Evaluation of Workplace Technology and Digital Infrastructure (usability)

Participants

Include list of participants, by role and institution

Observations

Include list of locations, classes, and resources observed

Questions Targeted to Roles

Specific questions can be answered best by targeted personnel from specific roles. The interview process takes time, due to the use of open-ended questions that foster spontaneous comments and allow the participant to highlight issues and areas of greatest relevance. Given the time constraints, it is important to ensure that participants first answer the questions that best reflect their experiences and expertise. After these questions have been answered, additional questions (from the General Questions section) can be explored.

Disability Service Providers

This group includes full-time disability services staff, part-time disability services staff, and specialized providers (tutors, coaches, counselors, mentors).

Area: Disability Service Personnel

- What staff positions currently exist in the DS office (DS providers, Learning Specialists, coaches, tutors, administrative etc?)
- Describe the qualifications and experiences of staff who directly support students

- Describe your office's interaction with the faculty and staff of the college's technological education programs
- Describe a situation in which a faculty or staff member's lack of experience or qualification has led to intervention by your office
- Are DS personnel adequately prepared to support students with disabilities in technology education programs?
- What types of issues do students in technology education programs experience that are not experienced by students in non-technology programs?

Area: Policies and Procedures

- What policies and procedures are in place to support and define the processes that must be taken by faculty, staff, and students to support students with disabilities
- Describe how you determine whether a person is qualified to provide services to students
- Describe the process for advising students on degree and career choices; are there special considerations for students in technology education programs?
- Describe the process for working with students who are struggling with specific technology courses and/or degree programs, or course prerequisites for these programs
- Describe the process for dealing with students who have insufficient documentation compared to those who have the appropriate information to receive accommodation
- Describe the policies that address how students must request accommodations and the college's response to these requests
- When and how do most students typically request accommodations?
- What kinds of accommodations are most common for students in technology education programs?
- What is the standard response (from faculty and staff) to requests for accommodations?
- How well do faculty and staff understand the policies and procedures for addressing situations that involve students with disabilities?
- What steps does the college take to ensure that policies and procedures are appropriately documented and disseminated?
- Are students trained in collaborating with faculty about accommodations?
- Are students provided with opportunities to role play instructor-student interactions that might be challenging?
- Are students provided with training/guidance related to disability law, including their rights and responsibilities?
- How does your institution support student understanding of learning styles, self-advocacy, study skills, etc.?
- In what ways are faculty encouraged to use Disability Services as a resource?
- Describe how technology education faculty typically work with Disability Services
- Does Disability Services and/or the college provide faculty training on disability related issues – the law, appropriate terminology, accommodation discussions and interactions, learning styles, UDI?

Area: Programs and Services

- List all of the programs and services offered for students with LD

- Identify programs/services that are offered explicitly for students in technology education programs (or their prerequisites)
- How many students are currently enrolled or using these services?
- Describe the programs that are most heavily used by students
- Which programs/services are most heavily used by students in technology education programs?
- What are the strengths/limitations of the programs most used by students?
- What services exist for students who are struggling in a specific course and/or degree program?
- Contrast the experiences of students with LD against those that are typical of students who do not have disabilities in your college's technological education programs
- What are the specific topics and/or courses your students in technological education programs struggle with?
- Is the drop-out rate among technological education programs higher, lower, or about the same as other programs?
- Describe the typical process for a student with LD to enter a technological education program?
- Explain how you go about making students and faculty/staff members aware of programs and services that are available to them

Area: Professional Development

- What is the most common/popular form of professional development taken by DS personnel?
- What kinds of professional development are not currently offered, but should be?
- Does DS offer professional development to faculty, staff, and/or students? If so, what kind of professional development offerings are most/least popular?
- Explain the steps that you take to improve faculty awareness of disability services. Are there recurring activities that take place each semester and/or each year?
- What kinds of professional development are most needed for faculty/staff in technology education programs?
- What kinds of professional development are most needed at local companies that employ graduates and students from your institution?

Area: Technology Resources

- What technologies are available for faculty and staff who work in technology education programs?
- What technologies are regularly used by students in technology education programs?
- Are there specific assistive technologies used by students in technology education programs?
- Are there specific assistive technologies which should be available to students in technology education programs but are not?
- Describe difficulties experienced by students or staff who use technology resources in technology education programs (e.g. lab equipment, specialized tools)
- Are technology resources known to be accessible and usable by students with disabilities? If so, how do you know? If not, what does your institution need to do in order to assess for accessibility?

Area: Infrastructure

- Describe the range of classroom equipment and layout for technology education courses (e.g. sufficient space to work, modern versus outdated tools, variations in equipment based on campus or location)
- What kinds of resources are made available to students in technology education programs?
- Do students have hands-on experience with state-of-the-art tools and resources that are used in technology jobs in the region?
- What kinds of resources would you like to see your institution purchase or make available to better support students in technology education programs?
- Where do students typically access technology education resources?
- Describe any difficulties students in technological programs have experienced accessing and/or utilizing resources

Area: Community and Professional Collaboration

- Describe current relationships you have with outside vendors, service and support agencies, and employers to support students
- What services would you provide (procure) if you had more resources available?
- Are there any regional employers that identify themselves as disability-friendly?
- Have outside collaborations lead to problems with faculty or issues in supporting students
- Identify regional employers and professional organizations who are best qualified (and most willing) to support students with disabilities

Area: Vision and Action

- Which part(s) of the college mission directly relate to serving students, especially those with disabilities or other unique needs?
- Are there gaps between what the college says is its mission and what it does day-to-day?
- Compare how the college supports students with disabilities versus how it supports students in specific academic programs (e.g. technology labs) or other activities (e.g. sports and other extracurricular programs)
- Explain the college's position (if it has one) regarding its support for students with disabilities who enter technology careers or advanced technology education (are there specific programs or pathways developed to enable students to meet their highest potential?)

Instructional Personnel

This group includes full-time faculty, part-time/adjunct faculty, and technology training personnel.

Area: Policies and Procedures

- Describe what you would do if a student discloses s/he has a disability to you
- What do you do when a student requests an accommodation?
- When and how do most students typically request accommodations?
- Which types of accommodations are most frequently requested?
- Describe any difficulties you have encountered when providing accommodations to students

- Are faculty/staff made aware of issues associated with students with disabilities (e.g. terminology, laws, institutional expectations, procedures)? If so, how?
- Describe what faculty generally know about student rights and responsibilities under disability law
- Identify aspects of your course that you believe students struggle with the most
- Describe topics or activities that you believe students with disabilities may struggle with more than students without disabilities

Area: Programs and Services

- Describe how you prepare students to have the hard skills (e.g. technical expertise and knowledge) necessary for the workplace
- Describe how you prepare students to have the soft skills (e.g. communications, group work, work ethic) necessary for the workplace
- Explain what job-related skills you feel are currently missing from your program, but should be included in the future
- What programs/services are available for students who are struggling in a technological education course?
- What is the most widely used program or service by students with disabilities?
- What are the strengths/limitations of the programs most used by students?
- Compare how you teach/work with students with disabilities (and those who learn differently) versus students without disabilities
- Explain how students are supported in developmental courses or courses that do not have prerequisites
- Which technology education courses and/or topics are most difficult for students to understand and master?
- Which technology education courses and/or topics are most difficult for faculty to teach?
- Describe the drop-out rate among technological education programs; is it higher, lower, or about the same as other programs?
- How are students prepared for the workplace?
- Are services provided to support students with resume development, course selection, interview skills, etc.? To what extent do students use these services?

Area: Professional Development

- What professional development opportunities are available for faculty and staff?
- Do faculty understand Family Education Rights and Privacy Act (FERPA) laws on confidentiality? How are they made aware of this information?
- What kinds of professional development are not currently offered, but should be?
- To what extent do faculty take advantage of professional development opportunities?
- What courses and development opportunities are typically taken?
- What do faculty know about student rights and responsibilities under disability law?
- Do faculty understand their own rights and responsibilities under disability law?
- Describe how faculty know if their instruction is relevant, meaningful, and applicable to the needs faced by regional employers
- Are there programs and opportunities for faculty to gain experience in workplaces that are most relevant to their content area?

Area: Technology Resources

- How do faculty/staff learn about assistive technologies and learning strategies to support students?
- Describe how you use and implement technologies in your classroom
- Which technology resources are required for students in your course?
- What kinds of technologies do students typically struggle with in your program?
- Are modern technology resources used in your institution? Are they similar to the kinds of resources used in industry?

Area: Infrastructure

- What instructional resources are typically available for students?
- Describe your typical classroom (physical, hybrid, online) environment
- What resources or improvements would you recommend that your institution invest in to improve its technology education programs?
- How do faculty typically teach their classes (e.g. lecture, activities, multimodal instruction)?
- Do faculty use online resources as part of their instruction?
- Are students exposed to the technologies that are typically used in industry?

Area: Community and Professional Collaboration

- Have outside collaborations lead to problems with faculty or issues in supporting students?
- Describe opportunities faculty have to combine the workplace and the classroom
- Identify current partnerships that your institution has with regional technology companies and professional organizations
- Is your institution/department working with regional organizations to address local technology job needs? If so, identify the organizations you work with, and describe the general process for engagement

Students

This group includes students who are receiving disability services, students who are not receiving disability services, students who have graduated or transferred, and new students.

Area: Policies and Procedures

- How well do faculty and staff understand the policies and procedures for addressing situations that involve students with disabilities?
- How well do students understand the policies and procedures for addressing situations that involve students with disabilities?
- Explain the process you would follow to get an accommodation or additional support in a course that you were struggling with
- Do faculty and staff members help students achieve their potential in technology education courses? How?

Area: Programs and Services

- Explain how you decided to pursue a degree or a course in a technological field
- Describe any difficulties you've encountered in your degree program (specific courses, topics, etc.)
- Which classes in your degree program are you most concerned about taking?
- List all of the programs and services offered for students with LD

- Describe the services that are available for all students who experience difficulty in a technology education program
- What services/programs are most commonly used by students in technology education?
- What are the strengths/limitations of the services/programs used by students?
- Do any of the programs offered at your college provide you with study skills and other learning strategies?
- What programs and services are there to gain support in preparing for, and finding, a technology-related job?
- If you have experience with Disability Services, describe their services and explain how effective they are
- Explain the drop-out rate among technological programs; do you believe it to be higher, lower, or about the same as other programs?
- What could the college do to better prepare you for success in technology courses and careers?

Area: Professional Development

- What do you know about student rights and responsibilities under disability law (e.g. ADA, Section 504 of Rehabilitation Act)
- What do you know about student rights and privacy issues covered under the Family Education Rights and Privacy Act (FERPA)?
- Are you aware of what the definition of a disability is under the law?
- Does the college offer services (training, job placement) to prepare you for a technology-related job? If so, what kinds of services are offered?
- Does the college offer you career-related courses or services that you can take after you graduate or leave the institution? Describe these services.

Area: Technology Resources

- What technologies are regularly used by students?
- What kind of training does the college provide to help you learn about how to use different technologies?
- What technology resources are available here that are not available at other institutions?
- Is there a specific type of assistive technology commonly used by students on campus?
- How do students usually go about using assistive technology?
- If you use assistive technology, describe any difficulties you've experienced using these technologies in your courses
- What technology resources do you find to be most useful and helpful? Are these available at your college?
- What technology resources do you believe would be most useful and helpful in your career (at your workplace)?

Area: Infrastructure

- What class resources are available for students?
- Describe the range you've seen in different classrooms; what layouts are most common; how does the equipment vary (e.g. state-of-the-art, outdated, not relevant or applicable to the workplace)

- How do faculty members typically teach their classes?
- Do faculty use online resources? If so, how do they usually use them?
- What kinds of resources are typically made available to students?
- Where do students usually access course resources?
- What kinds of resources are currently missing, but should be included?

Area: Community and Professional Collaboration

- How do students learn about services that are available and best suited for their needs?
- What is it like for a student using a service? Describe the enrollment process and the experience of the student as the service is provided
- Describe how faculty and staff prepare students for the workplace
- Does the college offer programs to help prepare students to get technology careers? If so, describe these programs

Area: Vision and Action

- Does the college seem to take some responsibility for helping you get a local job in a technology field?
- Do you feel that your college makes it possible for you to achieve your educational goals?
- How well does the college support students with disabilities and other needs? How does this compare to how well the college supports students in specialized programs, such as sports or specific academic departments

Administrative Staff

This group includes high-level administrators, admissions representatives, evaluations representatives, counseling staff (career, transitions), and technology administration staff (network staff, help desk).

Area: Personnel

- What leadership positions currently exist to support and promote technology education?
- What leadership positions currently exist to support and promote success for at-risk students such as underprepared students and those with disabilities?
- Which offices are responsible for identifying technology industry needs and tracking the success of students in technology education?
- Describe a situation in which a faculty or staff member's lack of experience or qualification has led to intervention by your office
- Describe the qualifications and expectations of your technological degree faculty
- Which technology-related domains of expertise are most difficult for you to obtain in your institution (e.g. hiring faculty in technology-related fields, staff technology specialists)? Which are most in-demand in your region?

Area: Policies and Procedures

- Explain how your institution goes about assessing and addressing the needs of technology employers in the region
- How well do technology program faculty and staff understand the policies and procedures for addressing situations that involve students with disabilities?

- Describe an unusual situation or circumstance that forced an adoption of a new policy or clarification of an existing policy to address the needs of students with disabilities
- Describe the process for identifying and prioritizing the region's workforce needs

Area: Programs and Services

- Which technology-related fields do you see offering the greatest growth potential for your institution?
- What technology-related degree and certification programs do you offer for students?
- Which of these programs do you feel are best-suited for at-risk students and those with disabilities? Why?
- Describe career counseling services available to students on campus
- Is the drop-out rate among technological education programs higher, lower, or about the same as other programs?

Area: Professional Development

- What kinds of professional development are mandated for college faculty and staff members (if any)?
- What kinds of professional development do technological program faculty typically take?
- What do administrative staff know about student rights and responsibilities under disability law?
- What steps has your institution taken to ensure that faculty and staff members are up-to-date on the needs of the technology industry and your regional workforce?

Area: Technology Resources

- What resources are readily available for faculty and staff?
- What kind of training is provided for using these technologies?
- Which technology resources are most needed in your college system?
- Describe the most state-of-the-art technology labs and classrooms in your system

Area: Infrastructure

- Describe a situation in which you were approached by faculty, staff, or students about issues associated with lack of resources
- Explain how you go about requesting and implementing new equipment and resources
- Do students have hands-on experience with state-of-the-art tools and resources that are used in technology jobs in the region?
- What kinds of resources would you like to see your institution purchase or make available to better support students in technology education programs?

Area: Community and Professional Collaboration

- Who on campus is responsible for establishing and cultivating relationships with regional employers?
- Describe current relationships you have with outside vendors or service agencies to support students
- Identify regional employers and professional organizations who are best qualified (and most willing) to support students with disabilities

Area: Vision and Action

- Describe the college's mission and how it relates to serving at-risk students and those with disabilities
- Are there gaps between what the college says and what it does, regarding support for students with disabilities?
- Describe how the college evaluates and prioritizes its needs with regard to students in technology education programs
- Explain the college's position (if it has one) regarding its support for students with disabilities who enter technology careers or advanced technology education (are there specific programs or pathways developed to enable students to meet their highest potential?)
- What indicators does your institution use to assess the success of its technology education programs?
- Which indicators does your institution use to identify the effectiveness of its programs to support students with disabilities?

Employers

This group includes regional employers that employ graduates from advanced technological programs at local colleges.

Area: Personnel

- What kinds of educational programs do most of your employees graduate from?
- Where (from what institutions) do you find your most highly-skilled employees?
- How many employees do you have from local community college technology education programs?
- Which education programs (degrees, majors) do you primarily recruit/hire from?
- What qualifications are required for your technological employees?
- What hard skills are most critical for your technological employees?
- What soft skills are most critical for your technological employees?
- What skills are most lacking in the current technological workforce?
- What skills do most employees struggle to master?
- Do you currently employ persons with disabilities?
- What areas of expertise are in most demand for your company?

Area: Policies and Procedures

- How does your organization recruit qualified technology candidates?
- Describe the process you use to determine that a technology candidate is qualified for the job
- Explain if/how your organization communicates the skills that are most in demand so colleges can prepare future employees
- Describe your policies and procedures for accommodating employees with disabilities
- Describe a situation in which a technology employee required assistance or accommodations as a result of a disability or health-related condition

Area: Programs and Services

- Identify the resources available to employees who need health or disability-related support

- What workplace accommodations do you provide to persons with disabilities?
- Describe your recruitment and application process for your technological positions

Area: Professional Development

- Describe the new hire orientation and training process
- What kinds of professional development are mandated by your company (if any)?
- How does your organization stay current regarding the most-needed professional development for technological positions?
- Have there been situations where a recent graduate was unable to fulfill his or her job responsibilities?
- Explain how employees can further develop their technological knowledge and skills
- Explain how employees can further develop their communication and teamwork skills

Area: Technology Resources

- Identify the types of technologies that employees use in your organization
- Describe specialized technologies (requiring additional training) that are used in your organization
- Which technologies seem to be the most challenging for new employees to master?

Area: Infrastructure

- Describe the typical work environment for your technology employees
- Has your company had to modify any work areas to accommodate the needs of technological employees? If so, describe these modifications

Area: Community and Professional Collaboration

- Do you have difficulty finding applicants who possess the skills and qualifications for your technological positions?
- Describe your company's relationship with the local college
- What professional organizations is your company affiliated with?
- Identify the programs that are currently in place between your organization and local colleges and workforce organizations (e.g. internships, co-ops, shadowing)

Area: Vision and Action

- Describe some of the benefits and challenges that you believe persons with disabilities might experience going into a technological career
- How might the local college better prepare technological program graduates for the workforce?
- What opportunities exist for colleges to develop programs to improve the knowledge and skills of your existing employees (e.g. prepare them for advancement)?

Employees

This group includes graduates of advanced technological programs at local colleges who are now working for regional employers in technological fields.

Area: Personnel

- What qualifications are required for your current position?
- What hard skills are most critical for your current position?
- What soft skills are most critical for your current position?
- What skills did you struggle to master when you joined this organization (or first entered the field)?

- Following graduation, did you feel adequately prepared to enter the technological workforce?

Area: Policies and Procedures

- How does your company identify its needs related to job skills and technology expertise?
- What process do employees follow to get additional assistance or support for job-related tasks and duties?
- Are there people with disabilities at your company? If so, what jobs do they have?
- How well does your employer understand disability law?
- Describe your employer's policies and procedures for accommodating employees with disabilities

Area: Programs and Services

- Explain how you decided to pursue a degree in a technological field
- Describe any difficulties you've encountered in your degree program (specific courses, topics, etc.)
- Which classes in your degree program were you most concerned about taking?
- Describe the application and interview process you went through for your current position
- What were some of the greatest challenges you experienced when you started this job?
- What kinds of resources (programs, services) would be helpful for new employees?

Area: Professional Development

- Describe the new hire orientation and training process
- What kinds of professional development are mandated by your company (if any)?
- Which professional development topics do you believe would be most beneficial for new employees at this company?
- Have there been situations where a recent graduate was unable to fulfill his or her job responsibilities?
- What do you know about employee rights and responsibilities under disability law (e.g. ADA, Section 504 of Rehabilitation Act)?

Area: Technology Resources

- What technologies are employees expected to use at this organization?
- Are there technologies that you had to learn how to use when you started in your current position? If so, describe these technologies and how you learned to use them

Area: Infrastructure

- What is the typical workspace configuration in your company?
- Describe any resources you are lacking to successfully complete your job

Area: Community and Professional Collaboration

- Describe your company's relationship with the local college
- Does your company have programs with outside agencies (including colleges) to help recruit and prepare potential job candidates?
- What professional organizations are you affiliated with?

Area: Vision and Action

- Describe some of the benefits and challenges that you believe persons with disabilities might experience going into a technological career
- How might the local college better prepare technological program graduates for the workforce?
- What opportunities exist for colleges to develop programs to improve the knowledge and skills of your existing employees (e.g. prepare them for advancement)?
- Are there gaps between what the college says and what it does, in terms of preparing students for technology careers?

Community Service Organizations

This group includes counselors, coordinators, and other personnel who are involved in regional workforce and employment efforts through vocational rehabilitation, workforce/economic investment boards, transition support groups, and similar organizations.

Area: Vision and Action

- Describe your organization's role as it relates to the region's workforce
- Describe your client population
- How might the local college better prepare technological program graduates for the workforce?

Area: Programs and Services

- Describe the services your organization offers
- Describe how your clients come to know about the services you offer
- Contrast the services offered at your organization with those offered to your clients at other organizations (school, work, etc.)
- Which of your services are most popular?
- Which of your services are most needed for technology employees?

Area: Community and Professional Collaboration

- Describe your organization's relationship with the local college
- Describe your organization's relationship with regional employers
- Which regional employers stand out as 'disability-friendly' when it comes to employees?
- Identify a successful program in your region, and describe how it works
- What kinds of collaborative technology programs are most needed in your region?

Area: Personnel

- Describe the personnel who work at your organization, and the qualifications they possess
- Explain the process of finding applicants who possess the skills and qualifications for the positions available in the region
- What qualifications are required for technological positions in the region?
- What hard skills are most critical for technological positions in the region?
- What soft skills are most critical for technological positions in the region?
- What skills are most lacking in the current technological workforce?
- What key workforce skills do most of your clients struggle to master?

Area: Policies and Procedures

- Describe the intake process for new clients
- How does your organization handle special requests from clients (e.g. workplace accommodations)?
- Are there policies and procedures that hinder your organization's ability to be successful? (Describe processes that get in the way)

Area: Professional Development

- Does your organization offer any training or professional development?
- Does your organization offer any training or coaching surrounding employees' rights and responsibilities in the workplace?
- What kinds of professional development are most frequently used by your organization?
- What kinds of professional development would best improve your clients' abilities to be placed into successful jobs and opportunities?

Area: Technology Resources

- What technologies are available to your clients through this organization?
- What kind of training is provided for using these technologies?
- Are there technology resources that clients need to master prior to being placed in a job?

Area: Infrastructure

- Describe the typical workspace configurations that your clients experience when they are placed
- Do some companies have problems with access in their workspace? If so, describe what these problems are like

Data Needs

Data needs refer to specific answers that need to be gathered during the assessment process. It is not critical that data needs be provided by each interviewee, although qualitative data should be supported by converging evidence from interviewees representing different roles. For example, an organization's professional development approach might be high-quality and compliant with established standards, but student and faculty experiences may indicate weaknesses and limitations.

Area: Personnel

- Total number of students in technological education programs
- Number of students with disabilities (especially LD) in technological education programs
- Number of students dropping out of technological education programs in the past 2 years
- Number of students dropping out of non-technological education programs in the past 2 years (for comparison)
- Number of students using services
- Number of personnel providing services
- Qualifications & experience of key personnel
- Staff knowledge of programs and policies for students with learning differences
- Faculty knowledge of programs and policies for students with learning differences
- Typical level of interaction between technology education faculty & staff

- Faculty understanding/awareness of universal design and teaching techniques to support students with learning differences
- Administrator understanding/awareness of policies and programs to support students with learning differences
- Assessment and evaluation capabilities of staff
- Degree of fit between students with disabilities (especially LD) and faculty

Area: Programs and Services

- Common barriers (e.g. gateway courses, prerequisites) to accessing technological education programs
- Technological education programs offered
- Number of students in technological education programs using tutoring services
- Formal services offered to technological education students (computer labs, formal tutoring, coaching)
- Informal services offered to technological education students (peer mentoring, advising, networking)
- Frequency of use of particular services/programs by technological education students
- Accessibility and usability of services
- Ability to track technological education student use of services
- Ability to evaluate effectiveness of services (student comments)
- Level of interaction/participation from technological education faculty
- Existence of orientation and bridge programs to support new/departing students

Area: Professional Development

- Amount of training provided to technological education faculty and staff regarding services for students with disabilities
- Amount of training provided to technological education faculty and staff to improve teaching of students with disabilities
- Frequency of training delivered/provided
- Awareness of specific training needs required by different departments, faculty, staff
- Provision of training directed at specific groups within college (e.g. administration, academic support services, faculty)

Area: Technology Resources

- Current software/hardware that students in technological education programs are expected to master
- Current software/hardware provided for students
- Location(s) where students can access hardware/software
- Prioritized list of investments to further support technology needs of students/faculty/staff
- Current Assistive Technology (AT) capabilities and services available to students
- Use of AT in the classroom
- Level of student awareness and usage of AT
- Level of faculty awareness and usage of AT
- Level of staff awareness and usage of AT
- Effectiveness of technology resources for supporting students with LD
- Number of faculty/staff trained in use of AT

- Number of classes developed to support use of AT in curriculum

Area: Infrastructure

- Level of technology infrastructure on campus – number of “smart” classrooms and labs, wireless networks, wired ports, whiteboards, built-in projectors, online course resources
- Availability of training for faculty and staff
- Availability of manuals and instructions for faculty and staff
- Presence of dedicated personnel to support and troubleshoot infrastructure
- Number of technological education classes with online components
- Number of technological education classes that use digital media (e.g. powerpoint, digital text, Blackboard)
- Current policies and procedures regarding use and upgrade of infrastructure
- Historical funding levels for disabilities services
- Projected funding levels for disabilities services
- Known needs and gaps in infrastructure that may inhibit learning by students with LD

Area: Community and Professional Collaboration

- Types of professional services available for technological education students
- Frequency of use of professional services for technological education students
- Activities with local school systems or community groups to recruit and support technological education students at college
- Agreements with local or national foundations to improve services for students with disabilities
- Partnerships with other colleges to improve technological education for students with disabilities
- Participation in professional networks and organizations

Area: Vision and Action

- Specified vision of administration, faculty, staff for improving services to students with disabilities
- Specified vision of administration, faculty, staff for improving/adding technological programs
- Mission of college as it relates to supporting students
- Current actions and activities taken to support students with disabilities in technological education programs
- Formal commitments by administration to improve services to students with disabilities
- Degree of cooperation and action with state and federal organizations to improve advocacy and awareness

Appendix: Interview Questions Background and Rationale

The following questions should be posed to interviewees as an initial prompt to facilitate and guide the discussion process. Although coverage of all questions is not required, the interviewer should

ask enough questions to provide coverage of all assessment areas. To ensure adequate coverage of each topic area, interview questions were designed to fit several types of questions used in ethnographic interviewing (see J.P. Spradley's 1979 text, *The ethnographic interview*, published by Holt, Rinehart and Winston, and L.E. Wood and J.M. Ford's 1993 article, "Structuring interviews with experts during knowledge elicitation", in the *International Journal of Intelligent Systems: Special Issue on Knowledge Acquisition*, volume 8, pp. 71-90.)

Grand Tour questions are designed to elicit general overview information, while *Case-Focused* questions are provided to gather specific details about a specific service or issue. *Compare-Contrast* questions elicit information regarding the relative strengths/weaknesses between two or more services or issues. *Typical* questions address the standard mode of operation for a service or situation, while *Critical Incident* questions highlight salient breakdowns in services or operations. Finally, *Talk-Throughs* are provided to encourage interviewees to walk through the specific steps or procedures that are required in order to provide or receive a service.

Each set of questions is divided into 8 areas. The areas are intended as general categories for grouping each set of questions, although considerable overlap is expected. The 8 areas are as follows: Personnel, Policies and Procedures, Programs and Services, Professional Development, Technology Resources, Infrastructure, Community and Professional Collaboration, Vision and Action. It is important to note that the areas were selected to ensure adequate coverage of different components of the postsecondary environment – some assessment participants (such as students or adjunct instructors) may be asked questions from one or two areas, while other participants (such as DSS staff and organizational administrators) may answer questions from each area.

The 8 areas that comprise this needs assessment instrument roughly follow the professional standards for Offices for Students with Disabilities outlined by AHEAD (see Dukes & Shaw, 1998). For reference, these areas are as follows: Administration, Direct Service, Consultation/Collaboration, Institutional Awareness, and Professional Development. Although the areas identified in the AHEAD standards are important for ensuring that institutions are able to effectively support their students with disabilities, the current instrument takes a broader and deeper view of the abilities of an organization to effectively support its students.

Area: Personnel

Topics include number of staff dedicated to support students with LD, amount of professional development received, number of students supported, qualifications and specializations.

Grand Tour

- List all of the people in the college who interact with students
- How many different people (roles) are available to work with students

Case-Focused

- Describe the qualifications and experiences of staff who directly support students

Compare-Contrast

- Compare the level of awareness and qualification of disability support staff with that of faculty

Typical

- Who is typically involved in providing support to students

Critical Incident

Describe a situation in which a faculty or staff's lack of experience or qualification has led to intervention by your office

Talk-Through

Describe how you determine whether a person is qualified to provide services to students

Area: Policies and Procedures

Topics include current policies for students with disabilities, procedures for requesting accommodations or access, level of organizational involvement for addressing issues of concern, and the communication of organizational expectations regarding support for students with disabilities.

Grand Tour

What policies and procedures are in place to support and define the processes that must be taken by faculty, staff, and students to support students with disabilities

Case-Focused

Describe the policies that address how students must request accommodations and the college's response to these requests

What documentation (if any) is required for students who request accommodations

Compare-Contrast

Describe the process for dealing with students who have insufficient documentation compared to those who have the appropriate information to receive accommodation

Typical

When and how do most students typically request accommodations

What is the standard response to requests for accommodations

How well do faculty and staff understand the policies and procedures for addressing situations that involve students with disabilities

Critical Incident

Recall a situation in which you had to invoke a policy in order to get a response from the college

Describe an unusual situation or circumstance that forced an adoption of a new policy or clarification of an existing policy

Talk-Through

What steps does the college take to ensure that policies and procedures are appropriately documented and disseminated

What do you do when a student requests accommodation without appropriate documentation

Area: Programs and Services

Topics include specific programs offered to support students with LD, services and accommodations provided to students, peer-mentoring and networking opportunities, visibility and accessibility of services, awareness and dissemination of specific services for students.

Grand Tour

List all of the programs and services offered for students with LD

How many students are currently enrolled or using these services

Case-Focused

- Describe the programs that are most heavily used by students
- What are the strengths/limitations of these programs
- Are the programs better or worse than those offered at high school

Compare-Contrast

- Compare the quality of the programs/services offered at your college with those offered by other colleges
- Contrast the services offered at your college with those offered at high-schools where your students typically come from
- Contrast the experiences of students with LD against those that are typical of students who do not have disabilities

Typical

- Explain a typical day for a student with LD in your college
- What is the typical process for an entering student with LD
- Describe the standard services used by students with LD

Critical Incident

- In the past 6 months, recall a “disability emergency” that was experienced by you or your office
- Have you ever had to resort to disability law in order to ensure provision of services for a student

Talk-Through

- Describe what it was like for you to receive services through the office of disability services
- Explain how you go about making students aware of these programs and services

Area: Professional Development

Topics include training opportunities for specialists and non-specialists, cross-training between LD staff, faculty and other specialists, budget and resources available for training, ability to track and demonstrate competence in specific support areas.

Grand Tour

- What professional development opportunities are available for faculty and staff

Case-Focused

- What is the most common/popular form of professional development taken
- What kinds of professional development are mandated
- Do faculty have access to Family Education Rights and Privacy Act (FERPA) laws on confidentiality

Compare-Contrast

- What kinds of professional development are not currently offered, but should be
- Do faculty take advantage of any professional development opportunities

Typical

- What courses and development opportunities are typically taken
- What do you know about student rights and responsibilities under disability law
- Do faculty understand their own rights and responsibilities under disability law

Critical Incident

- Have there been situations in which lack of development has led to problems or inability to support students

Talk-Through

Explain the steps that you take to improve faculty awareness of disability services

Area: Technology Resources

Topics include assistive technologies used and supported by the organization, specialized computer labs and training facilities, training and familiarization opportunities for students and faculty, and ability for students to get technical support and troubleshooting assistance.

Grand Tour

What technologies are available for faculty and staff

What kind of training is provided for using these technologies

Case-Focused

What technologies are regularly used by students

Compare-Contrast

What technology resources are available here that are not available elsewhere

Typical

Is there a specific form of assistive technology used by students

Critical Incident

In the past year, have you been made aware of a technology that you feel is critically needed but unavailable due to resource constraints

Talk-Through

How do students go about using AT

How do faculty/staff learn about AT and learning strategies

Area: Infrastructure

Topics include presence of computer labs for classrooms, incorporation of accessible technology in classrooms, networking capabilities, access to electricity and network, technical support provided, integration of technology in the classroom, licenses and ability to purchase software and hardware, existing systems.

Grand Tour

What class resources are available for students

What is the range in classroom equipment and layout

Case-Focused

Explain the most state of the art classroom on campus

Compare-Contrast

Contrast your state of the art classrooms with those that are less equipped

Typical

How do faculty typically teach their classes

Do faculty use online resources

What kinds of resources are made available to students

Where do students access resources

Critical Incident

Describe a situation in which you were approached by faculty, staff, or students about issues associated with lack of resources

Talk-Through

Explain how you can go about requesting and implementing new equipment and resources

Area: Community and Professional Collaboration

Topics include partnerships and agreements with organizations outside the college, collaboration with other educational institutions and extra-curricular organizations, access to tutoring and other specialized services, degree of support in community for students with LD.

Grand Tour

Describe current relationships you have with outside vendors or service agencies to support students

Case-Focused

How do students learn about a service that is best suited for their needs

Compare-Contrast

What services would you provide (procure) if you had more resources available

Typical

What is the most frequent outside service used by students

Critical Incident

Have outside collaborations lead to problems with faculty or issues in supporting students

Talk-Through

What is it like for a student using a service – describe the enrollment process and the experience of the student as the service is provided

Area: Vision and Action

Topics include articulated plans for college improvement of resources, identification of supporting all students in mission statements, specific plans and steps taken to support students, culture that encourages professional development and student support, awareness of legal issues and development of policies to support students, support for student advocacy, presence of leaders who support LD resources and awareness in organization.

Grand Tour

Describe the college's mission and how it relates to serving students

Case-Focused

Which part(s) of the college mission directly relate to serving students

Compare-Contrast

Are there gaps between what the college says and what it does

Compare how the college supports students with LD versus other activities (e.g. sports, academics)

Typical

Describe how the college evaluates and prioritizes its needs with regard to students

Critical Incident

Has there even been a situation on campus where people have called for action to support students

Talk-Through

Explain how campus priorities and initiatives are developed and carried out