Since the reauthorization of the Individuals with Disabilities Education Act in 1997, the need for assistive technology for all students with a disability must be considered each time an Individual Education Program (IEP) is written or revised. When necessary, the need for assistive technology devices and services is determined through evaluation.

Assistive technology evaluations differ from academically-based educational evaluations in several areas. For example, there are no standardized tests that can determine whether or not a student will benefit from technology or what type of technology is necessary to meet the needs of the student. Since all students are different and their level and type of need differs across areas of learning, no two evaluations will ever look the same. In general, the areas that may likely be assessed in determining assistive technology needs might include computer technology, augmentative and alternative communication, mobility, positioning and postural alignment, sensory needs and environmental control. While many people who work in assistive technology have expertise in one or more of these areas, few people are knowledgeable in all of them. As a result, a team-based approach to evaluation that calls into consideration a variety of information and includes information from a number of individuals with expertise in targeted areas typically yields the most comprehensive type of evaluation.

This issue focuses on the topic of assistive technology in special education. We have included an article on the evaluation process as well as an article on transitioning a student from public school who relies on technology to achieve in high school to the college settings. Our pull-out section focuses on obtaining the necessary documentation to access accommodations in the postsecondary educational setting and includes a check list to guide students, parents and professionals through the process. Finally, our Q & A section addresses the types of assistive technology most commonly used in the school setting.

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Currently, there is no certification or license required in order for a person to consider him- or herself a technology specialist or expert. There are, however, voluntary credentials that can be obtained from organizations such as the Rehabilitation and Engineering and Assistive Technology Society of North America (RESNA) that have established competency requirements and established a certification examination to ensure that a person has the necessary skills to perform an assistive technology evaluation.

Regardless of the needs of the student, there are certain elements that should be included in a comprehensive assistive technology evaluation:

- Relevant health, medical, sensory and developmental information including a history of the disability and the impact that it has on learning.

- An observation period of the student in the environment(s) where the technology is believed to be necessary to support access and participation (including the home as applicable).

- Interview with all members of the team, including the family concerning IEP goals and objectives as well as the strengths and needs of the student.

- Identification of environments in which the student is expected to participate in order to benefit from a free appropriate public education.

- Description of the current method of accessing the educational plan and curriculum, including all technology currently used.

- Description of assessment methods used including trials with device options (as applicable) and the impact that they had on desired behaviors and learning opportunities.

- Recommendations should include (as applicable) a full range of options; justification for a specific choice over other comparable choices; timeline for implementation, and training information.

It is important to understand that schools are required to provide technology that is appropriate for the student to benefit from education; it is not necessary that the technology be of the most recent edition or the most expensive model or type.

When necessary, school districts are required to provide assistive technology evaluations as part of the process in determining whether or not a child has a disability and to identify the child’s subsequent educational needs. Under a policy statement issued by The Office of Special Education Programs (OSEP), an assistive technology evaluation falls under the classification of an independent educational evaluation; therefore, a parent has the right to request an independent assistive technology evaluation if the district has conducted one and the parents disagree with the outcome and recommendations.

Once an assistive technology evaluation has been completed and recommendations have been made, it is necessary to monitor and assess the student’s progress relative to the use of the technology. Advances in technology as well as changes in the learning environment, curriculum and disability of the student all impact the efficacy of assistive technology. It is important that ongoing assessment take place on both a formal and informal level to ensure that the technology is truly benefiting the student. Technology, no matter how appropriately matched to a student's needs, is of no value if it is not used in a manner that is appropriate for the student, the family and the context.

Reference:
State of Connecticut Department of Education
Guidelines for Assistive Technology
Learning Self-Advocacy: There Are No IEP’s in College

One of the most important components of a secondary student’s transition plan should be to learn self-advocacy skills. While the importance of being a self-advocate cannot be underestimated for any high school student, it is absolutely critical for the student with a disability who will be going on to a postsecondary education setting. Once there, it will be entirely up to the student to “self-identify” and present appropriate documentation to the institution substantiating the presence of a disability that significantly impacts the process of learning. It is also up to the student to inform each teacher of his or her disability and the need for reasonable accommodations.

The requirement to self-identify presents a significant change from obtaining a free appropriate public education under the Individuals with Disabilities Education Act. Under IDEA, it is up to the local education agency to identify a student’s needs and provide him or her with whatever accommodations may be necessary for the student to benefit from a public education. While a student may be entitled to certain accommodations at the postsecondary level, these accommodations are provided under civil rights laws including Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Therefore, it is up to the students to be able to explain his or her disability and to clearly articulate their needs.

For many students, this may be a difficult task. While in public school where the emphasis is on inclusion and minimizing difference, the process of “labeling” a student as having a disability is often viewed negatively. This sometimes leads to the practice of telling a student very little about why they require accommodations or need assistive technology. Additionally, there may be a belief that a student will “outgrow” a learning disability and therefore, discussion of the specifics of the disability and all of its implications are avoided. In the post-secondary setting, a student must have an identified disability that impacts learning in order to receive needed accommodations.
Therefore, it is best practice to teach a student early on to be comfortable with the “label” associated with his or her needs and to try a number of accommodations and/or technology in order to know which one works best. By the time a student graduates from high school he or she should be able to self-advocate in the following situations:

- describing his or her disability and its specific implications for accessing learning in that particular setting
- identifying the type of accommodations that are needed relative to the setting and the expectations of the task
- knowing how and when to access disability support services
- knowing how to resolve situations that arise without having to rely on parental intervention

In addition, students should be familiar with the laws that entitle them to accommodations in the postsecondary educational setting and the work place. Learning self-advocacy should be part of every student’s transition plan while in high school. Ideally, self-advocacy should be taught very early on and reinforced and expanded as a student matures and experiences new situations and challenges. Ensuring that a student is comfortable and confident in articulating his or her needs is a necessary component for a successful transition into adulthood.

Reference:
http://www.ldonline.org/ld_indepth/postsecondary/ncld_selfadv.html
The transition from high school to college is an exciting and challenging time for all students. For students with disabilities who will require assistive technology to access and participate in the college setting, the transition can be even more involved, but with comprehensive planning conducted well in advance, the experience does not have to be difficult or overwhelming.

For students requiring assistive technology or any other type of accommodation in the postsecondary setting it is necessary to present specific documentation of both the disability and the types of accommodations that are needed for the student to access the postsecondary program. In an effort to facilitate the process of obtaining appropriate documentation, the Connecticut Association of Higher Education and Disability (CT AHEAD) has put together a set of guidelines regarding documentation of a disability. These guidelines were designed to provide students and families as well as high schools, professional diagnosticians, postsecondary educational institutions and adult service providers with a common understanding of the type of documentation that is necessary to validate specific disabilities for the purpose of requesting accommodations at the postsecondary level.

A summary of the General Disability Documentation Guidelines follows. Students and their families should visit the AHEAD website http://vm.uconn.edu/~wwwcped/guidlns.htm for comprehensive information about obtaining appropriate documentation in preparation for transitioning to a postsecondary educational setting.
<table>
<thead>
<tr>
<th>Steps</th>
<th>Helpful Hints Checklist</th>
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<tbody>
<tr>
<td>1</td>
<td>Evaluator Qualifications: Professionals performing assessments, diagnosing specific disabilities and making recommendations for accommodations must be qualified to do so.</td>
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<tr>
<td>2</td>
<td>Current Documentation: Reasonable accommodations are based upon assessment of the current impact that a disability has on academic performance making it essential that documentation be recent.</td>
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<tr>
<td>3</td>
<td>Comprehensive Documentation: Six components should be included in the documentation of the disability:</td>
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<tr>
<td></td>
<td>1. Evidence of existing impairment. This includes a statement of the current problem and subsequent history as well as evidence of ongoing issues that significantly impact functioning.</td>
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<tr>
<td></td>
<td>2. Background information. This includes a detailed history of the disability, impact that the disability has on functioning, a description of current functional limitations pertinent to the academic setting, relevant history of prior treatment, therapy, interventions or accommodations.</td>
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<tr>
<td></td>
<td>3. Relevant testing. Assessment should be comprehensive; standard scores should be provided where applicable; interpretation of results is essential. Instruments used and data obtained must reflect a substantial limitation to learning or other major life activity for which the student is requesting an accommodation.</td>
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<td></td>
<td>4. Specific diagnosis. Documentation must include a specific diagnosis of the disability.</td>
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<td>5. Rule-out of alternative diagnoses or explanations. Documentation must address the possibility of dual or multiple diagnoses as well as behaviors that may mimic a specific disability.</td>
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<td>6. Integrated summary. A comprehensive summary is a necessary part of the documentation and should demonstrate that the evaluator ruled out alternative explanations for current problems; indicate that a disability exists that substantially limits learning; indicate whether or not a student was evaluated while on medications and the impact that medication had on the disability; indicate why specific accommodations are needed.</td>
</tr>
<tr>
<td>4</td>
<td>Rationale for recommended Accommodations: Documentation should include specific recommendations for reasonable accommodations.</td>
</tr>
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</table>
In addition to these general guidelines, there are also recommendations for documenting specific disabilities such as acquired brain injury, attention deficit hyperactivity disorder, sensory impairments (blindness, low vision, deafness, hearing impairment, etc.) learning disabilities, physical disabilities, psychiatric disabilities and other disabilities. It is important to remember that these are general guidelines that infer best practice but are not legally binding. Postsecondary settings establish their own requirements for documenting disability and subsequent accommodations. It is up to the student to find out what a postsecondary setting requires to verify a disability and to ensure that they have adequate information to satisfy those requirements.

### Resources for Assistive Technology

| **New England Assistive Technology Marketplace**  
http://www.neatmarketplace.org/ | “NEAT” is an assistive technology center located in Hartford, CT. It was started in 1999 to serve people with disabilities in obtaining AT. NEAT offers an array of services including training and information about AT, a lending library and an equipment restoration service. |
|---|---|
| **Guidelines for Assistive Technology**  
State of CT Dept. of Education  
http://www.state.ct.us/sde/deps/special/AT_Guidelines.pdf | The CT Department of Education has a publication explaining the guidelines for determining the need for AT in public schools. |
| **The ConnSENSE Bulletin**  
A free online AT resource  
http://www.connsensebulletin.com | The ConnSENSE Bulletin is a free on-line AT resource. The ConnSENSE Bulletin provides information about AT and contains articles on a variety of topics including what’s new in the field, product reviews, political updates, conferences, job listings and links to a number of resources. The ConnSENSE Bulletin website is updated weekly; in addition a free newsletter is published 4 times a year and available electronically to subscribers at no cost. Sign up today. |
| **Learning Disabilities Online**  
http://www.ldonline.org/ | LD Online is a website for parents, teachers and other professionals. It contains a number of resources including articles, essays, calendar and forums. LD Online publishes an electronic newsletter that is free to subscribers. |
| **Quality Indicators for Assistive Technology (QIAT)**  
www.qiat.org | The QIAT Consortium is a nationwide grassroots group that includes hundreds of individuals who provide input into the ongoing process of identifying, disseminating, and implementing a set of widely-applicable Quality Indicators for Assistive Technology Services in School Settings that can be used as a tool to support school districts, AT service providers, consumers, staff developers and policy makers. QIAT hosts an active list serve discussing an array of AT topics. |
| **Rehabilitation Engineering and Assistive Technology Society of North America**  
| www.resna.org | RESNA is an interdisciplinary association of people with a common interest in technology and disability that promotes research, development, education, advocacy and technology provision. |
| **Closing the Gap**  
www.ctg.org | Closing the Gap is a resource for consumers and professionals interested in assistive technology. The website is full of information and useful links. CTG publishes a bimonthly newspaper to subscribers for a fee. |
ASSISTIVE TECHNOLOGY IN POSTSECONDARY EDUCATION

Transition Planning Checklist

- Begin planning for the transition to postsecondary education early. Have a meeting no later than spring of the junior year to develop a list of the documentation that will be necessary to support the student in the college setting. In addition, identify the specific team members who will be responsible for providing each part of the documentation, how the information will be derived and when the process will be completed.

- Investigate postsecondary institutes early to identify potential placements with an appropriate level of disability support services. Meet with your high school guidance counselor throughout the junior year to develop a list of potential postsecondary school settings. Contact those institutions that seem to be a match for the student and determine the appropriate time to visit. Typically all students submit college applications in the fall of their senior year.

- Obtain requirements for disability documentation from postsecondary settings. When contacting postsecondary settings, ask to speak with a representative from the office of disability support services to obtain information on what is required by the institution to substantiate the presence of a disability.

- Compile a listing of all requirements for all potential postsecondary settings. Use this list to develop a plan for obtaining the necessary documentation.

- Identify the appropriate accommodations/technology that the student requires to succeed in the educational setting. Use this list to develop a plan for obtaining the necessary documentation. This should be done in the spring of senior year. A review of what is currently needed to support the student should be conducted to ensure that the student is aware of his or her needs and can articulate them.

- Ensure that the student is well trained in the use of the technology. Since students will be responsible for the technology in the postsecondary setting he or she must be familiar with how to set it up, use it and maintain it.

- Explore avenues for acquiring needed assistive technology. Start by contacting the office of disability support services at institutions that the student is considering attending to find out what types of assistive technology is available. Make arrangements to obtain what is needed to support the student prior to the student going off to school.

- Establish student goals in self-advocacy and include them in the Individualized Education Plan (IEP). Students should be comfortable articulating his or her own needs. Self-advocacy skills should be part of every student’s IEP from the beginning of high school.

- Communicate regularly with the educational team. Schedule a series of informal team meetings throughout junior and senior year that include the guidance counselor, resource teacher and other individuals who know the student’s learning style and needs. Use these meetings to review the plan and adjust as necessary.

- Make the process student-directed. It is necessary to include the student each step of the way. Including the student ensures that he or she is invested in the process and feels in control.
Q What is assistive technology under the IDEA?

A Under the Individuals with Disabilities Education Act (IDEA), assistive technology is defined as any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability. Assistive technology service is defined as any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. These specific definitions are not unique to IDEA as they are the same definitions found in the Assistive Technology Act of 1998. What is unique about IDEA is the requirement that the need for assistive technology must be addressed for every student receiving special education services on an annual basis at a minimum.

Q What type of assistive technology devices are available to students?

A Typically, assistive technology devices fall into 3 categories of sophistication ranging from low-tech to mid-tech to high-tech. Educationally related items that find their way into the “low-tech” classification often consist of pencil grips, raised-line paper, non-slip clip boards to stabilize paper work, highlighter tape, colored tabs for organization, picture cards for schedules and communication, angled work surfaces as well as writing tools and utensils with built up handles or other adaptations. Simply stated, low-tech devices do not require a power source.

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Continuing along the road from low to high tech, the “mid-tech” range is impressively expansive and includes items such as pocket recorders, talking calculators, lower capacity voice-output communication devices, switches, alternative keyboards and computer access devices, portable word processors, word prediction programs and simple environmental control units.

At the “high-tech” end of the continuum we find computer applications to adapt curriculum materials for alternative access to learning, digital voice output communication devices using symbolic representation for spontaneous communication, power mobility devices, text readers, electronic print enlargers, and voice or motion activated environmental control units.

Q How are all students needs met?

A If one were to attempt to become familiar with all of the products and adaptations that are available in the world of assistive technology, he or she would be busy 24 hours a day for several lifetimes and never manage to become knowledgeable, let alone proficient, with them all.

Fortunately, there are a variety of ways to address a student’s need for assistive technology. Some districts have developed local capacity by having district personnel trained individually or as teams to identify student needs and recommend assistive technology solutions. Often this approach is used with students with high-incidence disabilities, such as specific learning disability, who may have difficulty participating in reading and writing assignments. Software programs and low-tech devices designed for supporting students with learning disabilities are often well known to special education teachers and frequently available in many school districts.

Students with low-incidence disabilities, such as cerebral palsy, may benefit from the addition of assistive technology services and often have needs ranging in the mid to high-tech range. For students in this category, the first line of approach should be to include any related service providers the student or team may be working with or who are available in the district in helping to identify the need for assistive technology. Typically, occupational therapists, speech-language pathologists and physical therapists have training that encompasses the use of assistive technology relative to specific disabilities. Often, related service providers work in more than one school within a district and may be familiar with devices and adaptive equipment currently available for trial.

For some students with complex needs, the expertise of an assistive technology professional will be required; it is up to the IEP team to determine when the need for this type of service is required.

Q How do IEP teams go about matching the technology to the student & the context?

A Under IDEA, the purpose of assistive technology is to improve students’ ability to access and participate in the general educational curriculum, thereby enabling the student to receive a free appropriate public education (FAPE). In determining the need for assistive technology, the PPT must carefully consider the following information:

- Student needs relative to accessing curriculum and achieving goals and objectives in the IEP.
- Student and family preferences and attitudes toward technology.
- The educational environment and context in which any assistive device may be used.
- Level of support needed by the student to utilize the technology.
- Amount of training and expertise needed by staff, family and/or student to incorporate the technology into the curriculum.
Unless all of these items are carefully considered and planned for, the risk of abandonment of the technology will be very high; technology that is not used is of no value regardless of how appropriately matched it is to the curriculum or the IEP. Failure to consider the goals and expectations of the student and family surrounding the use of assistive technology can also limit the efficacy of the intervention relative to student outcomes.

Q  What happens after the technology is identified and received?

A  The use of any assistive technology device in the educational setting will require some level of ongoing support and monitoring. This fact must be recognized early on and plans for training staff, student and family to appropriately use and care for the device must be made part of the student’s IEP. Similarly, the integration of assistive technology into the curriculum must be regularly monitored and adjusted as the student progresses through school. Students change and grow rapidly and the technology they use must keep up with their physical and academic development to support their participation across a variety of venues. For example, high school students who require an alternative method to producing written output will most likely need to have it available in more than one class. Deciding whether to place the technology separately in each classroom or to have the student transport the technology from class to class will be a decision the team will need to make initially and most likely reexamine as the student progresses through school and the academic demands increase. Without a contingency plan to provide the level of support necessary to ensure consistent and efficient use of assistive technology, the student will not be able to benefit from its use.

Q  How else can assistive technology be used in a student’s program?

A  Assistive technology can provide increased access to and participation in the general educational curriculum. It can also provide opportunity for enhanced social relationships between students with disabilities and their non-disabled peers and increase participation in extra-curricular activities. In many cases, the addition of assistive technology devices and services to a student’s IEP helps promote the achievement of outcomes that might otherwise be unattainable.

References


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