Family Center on Technology and Disability

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Technology Voices

AT Evaluation: No Shortcuts to Good Outcomes

The debate is on. Is it better to invest hard-pressed education budgets in "one-size-fits-most" assistive technology or should schools continue to conduct an individualized evaluation of each eligible student to determine what will best serve his or her specific needs? Does reliance on widely available, universally designed equipment meet the IDEA mandate for individual consideration of AT? Are meaningful AT evaluations being resisted by schools because of their time and cost? AT professionals are not united in their opinions but the majority seem to maintain that an individual approach to AT assessment and evaluation, supported by IEP team involvement, is more efficient and produces more reasonable outcomes for children with disabilities. It is not merely, they say, a matter of matching an AT feature with a functional need.

Longtime Arkansas special educator and AT professional Bryan Ayres is a strong adherent of ongoing individual evaluations. "I believe in the theory that AT evaluation is an ongoing process and needs to be team-based," he declares, "which means that specialists like me are independent assessors and consultants. The information that we provide should

be considered as part of the team process."

The most reasonable outcomes, he points out, are dependent on far more than successful feature-matching. "They are produced by AT evaluations that facilitate the supports to ensure that devices and services work." Feature-matching, he cautions, is only one step in a complex process. "Proficiency in feature matching without an accompanying support network will not ensure a successful outcome." That support network, he emphasizes, consists of IEP team members, plus the need for coordination, organization, management, problem-solving skill and funding. "Lack of consideration of any of these pieces can result in device abandonment or a need for repair of the students overall program, when the feature match may have been a good one." Although the construction and maintenance of such a support network "can be difficult," he says, "the result for all parties is worth the effort. There are no shortcuts to good outcomes."

Bryan Ayres, M.ED., ATP Speaks

The father of a 21-year-old college student son with ADHD, Bryan Ayres has spent nearly all of his professional life as a special educator and much of that time as an assistive technology professional. Trained as a music educator at Henderson State University in Arkansas, Mr. Ayres segued after a year and half to a Masters program at the University of Arkansas in Little Rock in which he focused on teaching students with severe disabilities, with an emphasis on applied behavior analysis. His first non-music teaching positions involved students with severe and multiple disabilities who utilized no-tech, low-tech and high-tech mobility and communication supports.

He left the classroom in the early/mid-90s after 14 years to become an educational consultant in collaboration with the Arkansas Department of Education – at Easter Seals Arkansas where he would spend the next 14 years. "I was one of two consultants for severe disabilities in our state and always focused on AT." He participated in the Arkansas Department of Education's implementation of an assistive technology training project conducted during the late 1990s at the University of New Mexico under the auspices of the National Association of State Directors of Special Education (NASDE) and the Research Institute for Assistive and Training Technology which has since been absorbed by NASDSE.

In 2005, he recalls, "I was tasked with rejuvenating our Alliance for Technology Access (ATA) Center at Easter Seals Arkansas by continuing the partnership with the Arkansas DOE's special education unit. That was an opportune moment for me to cease being a consultant for the severe disabilities program and to direct the ATA center here. Because we were an AT organization, I obtained additional specialized training through RESNA (Rehabilitation Engineering and Assistive Technology Society of North America) and the RIATT program."

Today, as Director of the Easter Seals Arkansas Technology and Curriculum Access Center (TCC) (http://eastersealsar.com/tcc-training-page) he spends most of his time consulting on AT and universal design issues, "both of which combined comprise 75% of our activities, which are based on a contract fee-for-service arrangement with schools and agencies."

In addition to his TCC directorship, Mr. Ayres is director of and a main contributor to Quality Indicators for Assistive Technology (QIAT) in Post-Secondary Education (QIAT-PS) (http://qiat-ps.org/collaborators/). Sponsored by the Great Lakes Americans with Disabilities Act (ADA) Center and the Southwest ADA Center, QIAT-PS is a collab-

orative effort involving K-12 and post-secondary educators and is based on the successful implementation of AT indicators in K-12 public schools.

Following our interview with Mr. Ayres are re¬sources related to the themes he addresses in this issue. We've also included information about a few of the organizations in our database that serve fam¬ilies of children with disabilities. We invite you to share this information with your own networks. If you have an upcoming event or recently published resource that you would like us to include in a fu¬ture edition, please let us know that as well. Our new email address is: fctd@fhi360.org.

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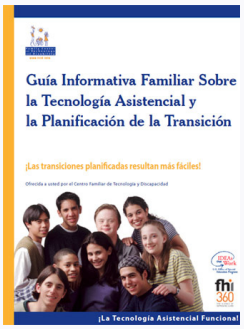
New Spanish Language Resource from the Family Center on Technology & Disability



The Family Center (FCTD) is pleased to release a Spanish language version of its new publication *Family Information Guide to Assistive Technology and Transition.* In addition to an extensive, illustrated glossary of AT and transition terms, the new guide helps families and teachers understand the role of assistive technology in IEP's, IFSP's, and transition plans. It describes the benefits of developing a student AT portfolio and provides a number of useful checklists and charts. The guide includes information on relevant laws in family-friendly language as well as stories of youth who have used AT to make successful transitions to higher education, employment and independent living. The guide can be accessed online in both Spanish and English at http://www.fctd.info/show/fig_summary

Unsupported AT Is Like an Unplugged Big-Screen TV

An Interview with
Bryan Ayres, M.Ed., ATP, Special Educator, Director, Technology and Curriculum Access Center (TCC), Easter Seals Arkansas


Bryan Ayres, M.Ed., ATP

"I view technology as neutral," Bryan Ayres remarks. "It sits there. It's like our big-screen TV at home. Without a little technology help from our kids who connected it to the satellite system that big TV would have just taken up space. The same is true for AT without supports to get it started and to maintain its effectiveness. Because reasonable AT outcomes are time-based, periodic needs analyses and continuous progress monitoring are at the top of the list of necessary supports. As-needed analyses ensure that an IEP team meets a child's AT needs in a timely fashion."

In these cash-strapped times, however, lack of support is a problem common to many school districts nationwide. Mr. Ayres, however, offers up a remedy that does not involve the expenditure of scarce district funds.

A Solution: Team Problem-Solving

According to Mr. Ayres, supports are often lacking after AT is acquired "because there may not be a clear outcome in mind. There may also be a lack of defined responsibilities, which is a frequent occurrence." His suggested remedy "is no different for me than programming other issues within a plan: [IEP] team problem-solving."

He explains that the knowledge team members possess in their areas of expertise is sometimes inadvertently not shared with the team, which leaves parents in the dark. Data, or its absence, is another significant factor. "We have difficulty keeping performance monitoring data in schools; we're asked to be accountable for much and gather a large volume of data but we aren't sure if the data has any meaning. As team members, we need a better understanding of the meaning of the data that we see." Responsibility for data tracking among IEP team members, he stresses, ought to be clearly defined. "Having a lot of data that's not easily accessible or easy to analyze can be detrimental to the evaluation process and may even stop the entire process in its tracks."

Part of the problem, he explains, is that the technology itself is often awarded higher priority in the evaluation process than the environment in which the technology will be utilized. Succumbing to the allure of new technology, he says, "is a big mistake. Outcomes, not bells and whistles, should be a team's focus "so that we'll know what a device will allow a child to achieve." Failure to focus on goal achievability, he adds, is a frequent point of departure for IEP teams. "This represents a failing on the team's part that will inevitably creep back to bite us." In other words, he continues, "the team makes a good feature match, progress is being made and then one of the supports breaks down or changes, or the child's needs change – and we don't continuously progress monitor or evaluate." The unfortunate result, he notes, "is that the team, the child and the child's family will struggle."

Even lower on the priority list, he insists, are the additional supports needed to help a child perform required tasks. "The evaluation has to be performed in all the environments in which the AT is used. The evaluation must be entered into with more than outcome in mind. Potential barriers to effective AT use must also be considered. The more problem-solving that can be done on the front end, the less trouble will be incurred when challenges emerge."

A frequent mistake, he points out, "is the one-time-fits-all decision with no follow-up evaluation. The IEP team needs to be able to reevaluate each time there's a need. That occasion may be the annual review or on an as-needed basis within a specified time frame."

His organization, the Technology and Curriculum Access Center (TCC), works with a variety of age groups beyond K-12, including families with transition-age children who will be attending college or joining the workforce. "The families in these two categories experience the same frustrations and same challenges, but it's important to them and to their children to be able to achieve reasonable outcomes as they prepare to depart a K-12 or K-21 setting. As-needed ongoing evaluations by the IEP team, with an environmental AT component, can facilitate that goal."

Another Solution: Trial Usage:

Pre-assessment trial usage, according to Mr. Ayres, can help ensure the achievement of reasonable AT outcomes. "Many teams conduct trial usage effectively and the practice is becoming more feasible to execute in a variety of contexts due to the popularity of mobile apps. Although mobile apps may not be the answer for all children they give us the opportunity to trial a range of systems."

So far, he concedes, trial use has been most prevalent among specialists. "The problem," he says, "is the confusion that exists in the field between a practical applied model and a medical model of evaluation."

In an applied model, of which he is a proponent, "information is obtained from a variety of sources to ensure that desirable outcomes will be in place and supported." A medical model, however, "is usually an expert model that allows practical processes like trial use to be managed mainly by a strong manager, i.e. a family member, a team member or an entire team." Teams lacking a strong manager struggle, he points out.

In the past, he adds, "many of the trial devices, trial loan programs or trial libraries required effort on the part of a coordinator to borrow the equipment, to track the data and to learn how the data was used. In many settings, especially in isolated rural areas, those roles are not defined – or may not exist." In such instances, due to a lack of training on the device or in the procedure, or to the absence of a support mechanism in place, "the trials will show less than stellar data." Unfortunately, however, he notes, "those conditions often prevail."

AT Abandonment: AT and Assessment Are Not a One-Time Event

Device abandonment, according to Mr. Ayres, is a result of a team's emphasis on feature matching at the expense of trial usage. "When an AT device or service fails, teams often haven't given it enough time before returning to the drawing board without a good data trail to determine why the device failed. Was it that the AT itself did not help a child or were the accompanying supports mismanaged? Often those questions are not answered." The only way to make sure these questions are adequately addressed, and to reduce equipment abandonment, he emphasizes, is to ensure that AT use and assessment are lifelong in duration.

Even today, he says, when so many school systems have become more sophisticated in their consideration of AT, "they continue to view AT evaluations as a three-year specialist cycle rather than as a progress-monitoring model." The issue of a device's lifespan, however, is another matter, he points out, one that is not easily resolvable. "Our smartphones, for example, have two-year contracts; after two years we're ready for a replacement with additional features."

Another factor in AT abandonment, Mr. Ayres notes, is a child's decision to change devices because using the device has made the child stand out in a way that causes social discomfort. For example, "children with low vision may prefer hand-held devices to bulkier video magnifiers even though the hand-held devices are less effective extended reading tools." Teams and families, he advises, not only must decide on the desired outcome but also must make their decision based on a child's input.

However, if a child's device fails, he explains, a range of possibilities is available for examination. "One option, and often the easiest, is to blame the feature match and change devices or shelve the original device. To me this is a poor tactic. To make any changes in the IEP when there is a difficult situation without taking and examining data can cause problems with AT just as it can create problems in other areas of education." IEP team members, he says, need to determine if all the technology implementation support roles were fulfilled and, if not, how best to fulfill them.

Is Independence the most Important Outcome Measure?

Independence, declares Mr. Ayres, "may be the most important outcome measure, requiring an ongoing, coordinated IEP team evaluation effort."

Mr. Ayres defines independence as "the ability to make choices, perform tasks and engage in activities as free from outside perspective as possible." Achieving independence in those terms is difficult in this era of fast-evolving telecommunication technology, he points out. "Our technology world flips every 6-8 months, yet our collective approach as educators to the impact of technology innovation often seems mired in a1960s-70s mindset."

Such a mindset, he asserts, is epitomized by opposition to keyboarding. "Access to a keyboard is an important step on a child's road to independence," he declares, "not a crutch." Yes, he acknowledges, keyboarding is replacing the need for students to learn to write legibly by hand, which is upsetting to some traditionalist educators. On the other hand, though, "keyboarding facilitates expression. There might be an argument that it would be nice for a child to produce a legible signature, but today it's clear that texting has become a primary mode of telecommunication, which reflects the world we live in."

Significantly, he adds, "keyboarding offers a way to dispense with more traditional supports provided by paraprofessionals that otherwise might never be faded."

Often, he adds, "we continue to think of this issue as an all or nothing proposition. There are schools nationwide that have chosen to go heavy into technology. Yet holdouts remain: many school districts are only now tentatively dipping their toes into technology – and there are schools in which no technology is permitted," including a school in Silicon Valley where the students are mainly the children of senior high-tech company executives. According to Mr. Ayres, "There are some benefits to such a setting as long as the concept espoused by the school – which utilizes the Waldorf method that emphasizes the role of imagination in learning – is not taken to extremes.

"If a child is learning to be a good communicator and is becoming aware that his/her curriculum has opportunities for discussion and higher level thinking, the child should be able to move into a changing and varied technology environment. But if a school employs a restricted curriculum a child with disabilities will struggle. What's most important is how effectively we leverage our technology, whether it's technology for the entire classroom, a specific dedicated technology for an individual student or whether its curriculum is the pedagogy that is used to deliver the technology."

Like keyboarding, classroom use of smartphones, even by children with disabilities, is sometimes frowned upon by educators, "some of whom remain convinced that a smartphone is a consumer-based entertainment device and therefore a likely source of distraction instead of a device that may hold vast potential for helping children with disabilities achieve optimum independence."

Yet he acknowledges that infatuation with the "cool" factor associated with much new technology can occasionally torpedo the best of intentions. "If we find a device that's cool but that six months later doesn't help us and is not facilitating independence, we set that device aside."

From Paras to Independent Support Tech: Sometimes a Tough Transition

Although keyboarding and smartphones use can help wean children with disabilities from their dependence on paraprofessionals, for instance, the transition to fuller independence is often difficult, Mr. Ayres cautions.

Independence, he declares, "is defined by an individual and has different meanings for each individual. The need to have a paraprofessional to provide support eventually changes with age." As aging proceeds, he points out, individuals with disabilities need to be more in control of the supports they acquire. "If we select the technology that ensures that a child will not need increased support from another person then the IEP team has to make sure, that in post-secondary settings, the young person is able to ensure that the support is delivered for as long as is necessary for the student to accomplish their goals."

The transitioning of a child from adult support to independent technology typically occurs in either of two ways — planned or unplanned — Mr. Ayres notes. He cites errorless learning (http://www.projectlearnet.org/tutorials/errorless_learning.html) as an example of a way to transition a child to independent supportive technology. Errorless learning offers a prompt fading, data-driven hierarchy that provides the level of support needed to ensure a desired outcome. The core of this method, which has proven to be especially effective for children with severe memory or intellectual impairment, is a systematic fade of the prompts and supports.

The hallmark of an unplanned transition, he explains, is the absence, from the outset, of such a systematic vision of process. This vacuum, he remarks, "all but guarantees deterioration of effectiveness as the transition unfolds in a haphazard manner."

Even a planned transition, he concedes, can sprout execution weaknesses. "Some planned transitions do not cover the 8-12 years that we have in our developmental period and instead are isolated in the 2-3 years during which the child had a data-driven teacher who paid close attention to the progress monitoring information and had a team whose members were continuously attentive."

Mr. Ayres notes that paraprofessionals, however, often smooth a transition's rough spots."We have paraprofessionals who understand what was being accomplished and work effectively within the team concept." Nevertheless, he adds, "There are some paras who find themselves role-conflicted and are caught between being a child's caregiver and their role as a paraprofessional educator." This conflict, however, can be mitigated by training and administrative support, he says.

He cautions against team member pre-occupation with issues of transition accountability and with the team's need to achieve benchmarks. "Working closely with the child and family is very important. Data gathering and interpretation remain crucial, but we should not be confined to consideration constrained by a curriculum-centered perspective. For example, if a child flunks a semester, how are we going to get him or her back on track? Procedurally, our method has to be sound; it must be systematically planned and analyzed."

Universal Design for Learning: Will It Make AT Obsolete?

Will the popularity and general implementation of Universal Design for Learning (UDL) methods eventually spell the end for assistive

technology? No – and yes, predicts Bryan Ayres.

UDL principles, he says, are already being utilized to smooth the impact on children when technologies conflict. Currently, he notes, there are enhancements in some areas of technology that are beneficial for some children with disabilities but can be detrimental for other children with different disabilities. For example, the proliferation of streaming audio is a boon for children who are blind. However, the same technology, because it is almost never captioned, presents a challenge for children who are deaf, "Captioning was considered specific for a limited disability group 15-20 years ago but is now regarded as beneficial for many populations in addition to the population for which it was designed."

Enhancements that are beneficial to some but contrary for others "have resulted in products with features that are more customizable, that can be turned on and off, that are scalable for the individual user. Overall, this has resulted in an environment that is becoming more universally designed." Inevitably, he says, UDL's role in these enhancements will neutralize the role of AT in some instances.

Is it likely that some AT issues now and in the future will be resolvable with universally designed solutions? "That's already the case and we'll see more instances in and out of education where universal design solutions are more encompassing, more generally equitable to more populations with disabilities and will prevail." Will UDL, for example, prevail 100% of the time? "No, not in my lifetime. There will always be a need for individualized AT solutions for some issues and circumstances. But this time of transition offers good opportunities for us as IEP team members and AT professionals to apply our problem-solving skills. Good design principles provide for effective solutions in multiple venues whether it is an AT or UDL solution."

Mr. Ayres's 21-year-old son is an information technology major in college who is nearing graduation. "He found during his college experience in accessible web design that the volume and quality of the information he received improved dramatically in just 2-3 years in his curriculum materials and instruction. The marketplace has driven that change, catalyzed by Apple, Google, Microsoft, Android and other technology industries who are far sighted. This competition to achieve more accessible web design has helped ensure that innovations are as universally usable as possible."

The Best Uses for Mobile Apps

Mobile apps are surging in popularity and ubiquity, with schools nationwide adopting iPads and iPods for children with disabilities. But what are the best uses for these apps? Declares Mr. Ayres: "With any technology innovation there are features that are really cool. In fact, they're faddish. And there are features that are substantive. Some technology innovations are both, while others are either fads or substantive. The consumer's responsibility, he says, "is to be open to innovation yet be as informed as possible in distinguishing the apps that are needed from those that are just nice to have."

He recommends that IEP team members and families use Consumer Reports to make that decision, "or consumers can join user groups or blogs and talk with families, therapists and children who are using the specific app" for the purpose in question. "I don't like to see a mobile used purely for enter-

tainment and reinforcement. We'll encounter some instances of that as always with each new phase of innovation and with each new fad. I date back to when Apple awarded Apple Grants back in the 1970s. We saw those features and products that did not work for us fall away while those that were effective continued to be integrated into technology platforms that still exist.

"I was talking to a group recently about gamers. The members of the group regarded gamers as a fad. I advised the group to take a closer look at gamers. After all, gamers operate in a virtual environment, coping with the monsters and other avatars in their app. To them these avatars can be used in other environments, contexts or processes.

"I recommend that we remain apprised of the apps that are available and keep abreast of how those apps are regarded by their users. There are strengths and weaknesses to an open market business model versus a closed market. I'm not an economics expert but the users groups and blogs have been helpful for me in making my own decisions about what to demonstrate in terms of apps that are effective and those that are merely entertaining. If student needs and environments are kept in mind, then a better decision will be made regarding adopting a mobile -- which is sometimes a more portable and convenient option for the consumer -- rather than a fixed unit of AT."

The Ascendance of Blended Funding and Shared AT Resources

With cost containment an ongoing concern, new trends are emerging in AT funding. Says Bryan Ayres: "I see more 'blended funding' for AT now than in the past. When I was a classroom teacher we had computers that could be utilized only by the speech-language pathologist or used in the special education classrooms." Now, however, "I see a blending of schools interchanging AT that I've acquired. I see a shared use of special and general education funding; not a comingling of funds, necessarily, but a shared responsibility."

While he lauds the new trend he also cautions that a balance must be established and maintained between meeting the general needs of a district or a school with the technology needs of individuals.

"Universities have struggled for years to provide accessible 504 and ADA accommodations in higher education, so we don't see a movement toward mandatory use of specific AT yet in a higher education environment. But I do see some warning signs that are exemplified by funding for interactive whiteboards. Schools purchasing these devices might regard a need as being met because the interactive whiteboard functions as a touch screen. However, schools might then fail to take the next step: considering individuals who need a touch screen on a laptop or a mobile for a specific purpose." He concedes that he has not yet seen this occur but is aware of the potential for misjudgments. The specific technology needs of individual students, he advises, "must be considered generically and specifically. Outside-the-box thinking is mandatory in order to deal with the current technology versus a strict fiscal policy."

Insurance-Funded AT: the Durable Medical Equipment Conundrum

To be funded by insurance most AT must qualify as durable medical equipment, i.e. wheelchairs and other equipment used for transportation purposes. Yet many AT devices fail to qualify for funding under current insurance restrictions. Like other AT

experts and IEP team members nationwide, Mr. Ayres seeks out ways to resolve this conundrum. "Durable medical in Arkansas typically means equipment that facilitates mobility, transportation and positioning. However, we've obtained insurance funding for durable medical-rated augmentative communication systems. Admittedly, getting this funding was not easy, and it's sometimes difficult for schools because the requirements are medical model-focused."

A parent, however, approached him with the following dilemma: her son needed a new device to replace the effective device – an icon-based communications system – he had had been using for several years. Unfortunately, Mr. Ayres recalls, the cost of a replacement device nearly maxed out the family's Medicaid limit without an extension of benefits. "The family had experimented with a mobile app for augmentative communication at a convention and liked it, but acquiring the equipment would take a year and a half and would be the last device of its kind the child would have during his youth. What the child's mother then told me resonates and rings true. She said, 'I can't afford $7,000 too many times in my child's life, but I can afford $500 for apps many times.'"

Unfortunately, Mr. Ayres reveals, "we are seeing no movement in our state in the consideration of durable medical equipment that's in the form of a consumer electronics device. What I do see, however, is willingness by most school districts to consider mobile apps and to work out the attendant funding issues that accompany that decision."

For example, he says, "Apple is not especially friendly with districts that run on the PO (purchase order) system which calls for checks to be cut on a monthly basis. Now, though, we are in a consumer electronics card-based era. In the non-PO era the fiscal options consist of making our purchases from iTunes or at an Apple store. Schools have yet to resolve their funding dilemma in this new era, but I'm confident that they soon will."

Most districts, he notes, are taking individual needs into consideration. "Some schools are using iTunes cards for their apps purchases. They're acquiring routers. Schools that attribute their reluctance to permit iPads or Android mobiles in their classrooms to computer security concerns are likely more concerned with bandwidth issues than security."

What's needed to resolve such district-wide dilemmas, he counsels, is the same solution he recommends to IEP teams when evaluating AT: the institution of a formal process backed by a systematic structure to replace "the ad hoc decision-making that too often solves an immediate problem while spawning long-term negative consequences which can paralyze a school district." Installation of these new structures, he admits, "will require the exercise of all our problem-solving skills, but the result will be worth the effort."

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Remote Expert Participation in IEP Meetings: Enter Skype

At a time when AT experts are often scarce commodities, especially in far-flung rural districts and counties, Skype technology enables these experts to participate remotely in IEP meetings and in consultations with children and their families.

"We're using web interfaces and Skype more than ever," says Bryan Ayres, "For example, our vision consultant is working with a school district in which a youngster is trying to learn Braille but the district has been unable to find a teacher for the visually impaired. So we've set up a Skype relationship with the special education teacher. Our consultant from central Arkansas takes a Skype trip for about three hours once or twice a month to meet with the teacher and student in the student's home district. This arrangement is not a replacement for having a vision teacher on site, however. The district is trying to find one, but in the meantime the current Skype relationship serves as a support for the student and his teacher and their regional State Vision Consutant.

"It would be best, of course, to have a specially trained AT expert with every team. However, for most educators and special education systems nationwide the mission and goal is to build capacity locally and know where to find the appropriate resources regionally and nationally."

RESOURCES

ARTICLES

Assistive Technology: Getting the Right Supports for Your Student

By Dave L. Edyburn, Ph.D.

National Center for Learning Disabilities (NCLD) (December 31, 2010)

In this podcast transcript Dr. Edyburn, founder and editor of Special Education Technology Practice is interviewed by Candace Cordiella on a variety of AT-related topics. Dr. Edyburn cites word processors and calculators as examples of technology not always regarded as AT but that function in assistive capacities when utilized by children with disabilities. He urges schools to provide speech-to-text devices to children with poor note-taking and handwriting skills. He advocates for meaningful consideration of AT by IEP teams, as mandated in the Individuals with Disabilities Education Act (IDEA).

http://www.ncld.org/at-school/general-topics/assistive-technology/assistive-technology-getting-the-right-supports-for-your-student

Assistive Technology Evaluation Procedures

Oklahoma Assistive Technology Center (2011)

This article on the OATC website describes the goals of an AT evaluation and the procedures to be followed by IEP team members and school staff. Although provided for Oklahoma schools, this is a well-articulated process that may be of interest to educators and parents in other states.

http://www.theoatc.org/more_info_eval.asp

PRESENTATIONS

AT Information for Families

Family Center on Technology and Disability (FCTD)

This PowerPoint presentation includes information that can be found in the Family Center's Fam-

ily Information Guide to Assistive Technology. The presentation introduces AT, offers examples of devices that can be used to address discrete areas of weakness and provides information about AT use in schools, funding for AT, IDEA, IEPs and mediation. Tips from parents and annotated resources are also featured.
http://www.fctd.info/powerpoints

Supporting Transitions of Assistive Technology Users

This module from the Texas Assistive Technology Network (TATN) offers information and resources for successfully transitioning AT services and devices as part of transition planning. The module examples focus on IDEA 2004 compliance and encourage students' self-determination in AT decisions. Presentation slides, video tutorials, interviews, and testimonials highlight students who have successfully transitioned while using a range of assistive technology.
http://www.texasat.net/default.aspx?name=trainmod.transition

PROGRAMS

Assistive Technology Fund (ATF)

Operated by the Association of Blind Citizens, the fund provides financial resources to cover 50% of the retail price of adaptive devices or software. Products covered by this program retail for a minimum of $200 and a maximum of $6,000. Persons eligible to apply for assistance have a family income of less than $50,000 and cash assets of less than $20,000. Applications must be submitted by June 30th and December 31st for each grant period (two per year). Applicants may submit one request per calendar year. All applications must be submitted via e-mail. The ATF is limited to U.S. residents who are legally blind.
http://www.blindcitizens.org/assistive_tech.htm

WEBSITES

i'm determined

Created by the Virginia Department of Education, this site provides free resources and information to help teachers and families encourage students' self-determination skills. I'm determined includes lesson plans, models, and videos to teach skills, including age-appropriate activities to encourage student participation in IEP meetings. The site lists books and other self-determination resources for teachers and families. http://www.imdetermined.org/

VIDEOS

Assistive Technology: Opening Doors to Independence

This video was created for the Parents iTECH Center in Santa Clara, CA by the Alliance for Technology Access (ATA), AT Network and California Department of Rehabilitation to spotlight the aspects of AT that promote independence. The AT devices depicted in the video range from simple magnifiers to complex computers. Further information can be obtained through any of the ATA centers listed at the ATA website. http://www.fctd.info/resources/5146

Boy Finds Voice through iPad: "Verbal Victor"

CNN affiliate WFMY, Greensboro, NC reports on a software application (app) called "Verbal Victor" in honor of Victor Pauca, a child born with Pitt Hopkins syndrome, a disorder which delays a child's development. Victor's communication skills are emerging but he is still unable to speak. The app was created by Victor's father, a computer science professor at Wake Forest University, for use on smartphones and iPads.
http://www.cnn.com/video/#/video/us/2011/01/17/dnt.ipad.helps.boy.talk.WFMY

BLOGS

iEducation Apps Review

This website/blog was designed by education professionals to identify and categorize apps and to solicit blog comments from users. The website also allows individuals to submit apps for review. http://www.fctd.info/resources/5234

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KNOWLEDGE NETWORK MEMBERS

The Arkansas Technology and Curriculum Access Center (TCC)

TCC is a partnership between the Arkansas Department of Education, Special Education Unit and Easter Seals Arkansas. TCC offers evaluation, consultation, equipment loan and in-service training to meet the needs of children and young adults with disabilities. Services are provided at the TCC Outpatient Services Center, both on-site and via web conferencing.

TCC evaluations include:

- Low vision/blindness computer evaluation
- Environmental control
- Computer access

Consultation services include:

- Portfolio assessment
- Accessing the curriculum in the classroom
- Integrating technology use Into the curriculum
- Installation/servicing of AT devices

TCC maintains an extensive loan library of assistive and accessible technology. The equipment in the loan library is available to schools to try as part of the AT consideration process for a six-week trial period.

For further information, contact:
The Arkansas Technology and Curriculum Access Center
Easter Seals Arkansas
3920 Woodland Heights Road
Little Rock, AR 72212
Phone: (501) 227-3600
http://eastersealsar.com/tcc-training-page

V-LINC

V-LINC, a non-profit computer resource center, was formed in 2010 from a merger of Learning Independence through Computers (LINC) and Volunteers for Medical Engineering (VME). V-LINC's focus is on improving independence and quality of life for individuals with disabilities via technology solutions and training. The organization provides opportunities to individuals, families and businesses to explore adaptive technology, computer systems, software and the Internet.

For more information, contact:
V-LINC
1001 Eastern Ave, 3rd Floor, MD 21202
Phone: (410) 659-5462 TTY (410) 843-0219
Fax: (410) 659-5472
Theo Pinnette, Executive Director
Email: info@v-linc.org
http://www.v-linc.org/

Quality Indicators for Assistive Technology in Post Secondary Education (QIAT-PS)

QIAT-PS offers tools and resources on quality implementation of

assistive technology in post-secondary educational environments. The project is sponsored by the Great Lakes ADA Center (http://www.adagreatlakes.org/) and the Southwest ADA Center (http://www.dlrp.org/). QIAT-PS is a collaborative effort of professionals from higher education and K-12 schools interested in successful implementation of AT indicators in public schools.

During 2009, QIAT-PS developed and distributed a nationwide survey to current and former students with AT needs in post-secondary settings. The results confirmed a need for post-secondary schools to improve their provision of AT. Additionally, the survey discussed the responsibilities of student AT users. The resources developed by QIAT-PS are aimed, therefore, at both service providers and consumers.

For additional information, contact:
QIAT-PS
Great Lakes ADA Center
University of Illinois-Chicago
1640 West Roosevelt Road
Chicago, IL 60608
Phone: (800) 949-4232
http://qiat-ps.org/
www.adagreatlakes.org

A.J. Pappanikou Center for Developmental Disabilities

The A.J. Pappanikou Center for Excellence in Developmental Disabilities

Affiliated with the University of Connecticut Health Center, the Pappanikou Center develops, implements and disseminates a coordinated group of applied research, demonstration and training projects directed at meeting the needs of persons with disabilities and their families in community based settings. The center employs an interdisciplinary staff that represents a wide range of experiential, training and multicultural perspectives. Three-quarters of the center's employees have a disability or a family member with a disability. The center's activities are underpinned by individualized supports, inclusion, self-determination, natural supports and collaboration with organizations to address policy issues and systems change.

For more information, contact:
A.J. Pappanikou Center for Developmental Disabilities
263 Farmington Ave., MC 6222, CT 6030
Phone: (860) 679-1500; (866)623-1315; (860)679-1502 -TTY
Fax: (860) 679-1571
Contact: Mary Beth Bruder, Ph.D., Director
Email: bruder@nso1.uchc.edu
http://www.uconnucedd.org/

Achievable

Achievable currently focuses on providing emergency support, specialized equipment and camp sponsorships, as well as implementing wellness programs that improve health, well-being and access to appropriate health care. They have established The Achievable Clinic, a community health center providing high quality, comprehensive health care to meet the specific needs of individuals with developmental disabilities.

Achievable's Emergency Support program provides resources, including help with AT funding, to qualified individuals who are experiencing financial hardship or are in an emergency situation.

For further information, contact:
Achievable
5901 Green Valley Circle, Suite 320
Culver City, CA 90230
Phone: (310) 258-4156
Fax: (310) 216-0929
Ursula Cafaro, Executive Director
Email: info@achievable.org
http://www.achievable.org/

Center for Technology and Learning (CTL)

Affiliated with the SRI research organization, CTL aims to improve learning and teaching through innovation and inquiry. CTL research and development activities focus on effective learning and teaching, and embody research insights in the innovative design, use, and assessment of interactive learning environments. CTL's work is conducted in educational settings such as classrooms, after-school programs and teacher education programs. CTL development, research, and evaluation:

- Prototype new interactive learning environments and tools, explore best practices and seek to understand the mechanisms that lead to better teaching and learning
- Systematically study and rigorously evaluate the outcomes of technology-supported educational innovations
- Organize workshops and conferences on topics of national importance, analyze and synthesize the research literature and develop recommendations and reports for educational leaders.

In addition, CTL's Strategic Learning Consulting practice enables educational technology firms to improve their products by harvesting research insights, strengthening educational designs and framing evaluations for impact.

For more information, contact:
Center for Technology and Learning
333 Ravenswood Ave.
Menlo Park, CA 94025
Phone: 650-859-5866
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http://ctl.sri.com/

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