

# Technology

## Raising the AT Bar: From Teacher Training to Tech Integration

## *Voices*



Like many educators, Dr. Charmaine Lowe's initial introduction to assistive technology was unexpected, untutored, and unequivocal. It happened a decade ago, Dr. Lowe recalls. "I was in an IEP meeting, which was an encounter for which my undergrad studies had not prepared me. I found myself conducting a rough and dirty search and getting online to get a handle on what I was going to be grappling with because I realized it was my job to be an advocate for this child. I learned fast that my training in special education and assistive technology was woefully inadequate. Fortunately, in that instance, all the parties were willing to learn and to understand, but the truth was we were dancing in the dark. From that point on I decided that the lack of preservice training in AT was something I could remedy as a college professor."

### **Charmaine Lowe, Ed. D., Speaks**

An academic specialist in multicultural issues with a strong interest in assistive technology, Charmaine Lowe was born, raised and educated in Mississippi. One of her earliest role models was her grandfather, an activist in rural Mississippi's civil rights move-

- 1** Raising the AT Bar: From Teacher Training to Tech Integration
- 3** AT Lessons Learned:  
An Education Professor Shares Her Insights  
*Charmaine Lowe, Ed. D., Assistant Professor,  
Department of Teaching and Learning, Austin Peay  
State University*
- 8** Resources
- 10** Knowledge Network Members



ment and president of the regional chapter of the NAACP.

Dr. Lowe earned her undergraduate degree from the University of Mississippi and her advanced degrees in education from Vanderbilt University's Peabody College.

Dr. Lowe regards teaching as a family heirloom. "I have seven aunts," she says, "and five of them are teachers." She began her educator career as an English teacher in multicultural communities in Seattle, WA and elsewhere. Her grandparents also harbored teaching aspirations. However, she remarks, "the demands of raising a family in the agrarian, pre-civil rights Deep South precluded attending college."

Today, she explains, she teaches a battery of diversity-related preservice courses in the Department of Teaching and Learning at Tennessee's Austin Peay State University (APSU) near Nashville. "I integrate AT into my courses although I don't teach a full-blown AT course. I try to relate what I teach in class to [important] trends in education, including AT."

Many of her preservice teachers, she explains, take their knowledge of AT to multicultural classrooms in districts that have attracted many Hispanic immigrants and transient workers as well as families from a variety of other cultures. No matter what a student's cultural heritage may be, she notes, those with disabilities can benefit greatly from classrooms into which AT has been integrated.

Classroom technology in general, she emphasizes, "has proven to be a boon for students whose education patterns may be staggered due to hospitalization or transience. Technology, including AT, stabilizes education patterns and aides students in

matriculating their course of studies."

Often, Dr. Lowe says, she looks back to her early days as a teacher in secondary schools in transitioning neighborhoods brimming with students from Laos and Vietnam, when technology and AT were new, exotic, bubbling with future potential – and rare in K-12 classrooms. "Things have improved significantly since then," she declares, "but we still have a ways to go."

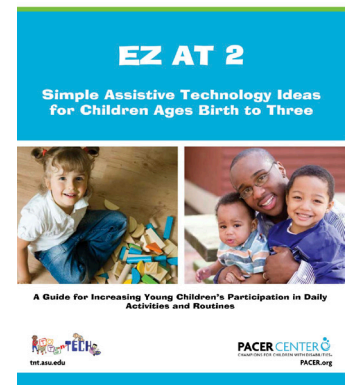
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## Coming Soon!

### EZ AT 2: Simple Assistive Technology Ideas for Children Ages Birth to Three

EZ AT 2 is a guide for increasing young children's participation in daily activities and routines using assistive technology. PACER is known for its high-quality, family-friendly publications.

This one is a follow-up to their popular EZ AT: Assistive Technology Activities for Children Ages 3 to 8. Funded by Tots-n-Tech, the publication will be available for purchase this summer. For more information about EZ AT and EZ AT 2 visit [www.pacer.org/publications](http://www.pacer.org/publications). For more information about Tots-n-Tech, visit [tnt.asu.edu](http://tnt.asu.edu).



## AT Lessons Learned: An Education Professor Shares Her Insights

An Interview with  
Charmaine Lowe, Ed. D., Assistant Professor,  
Department of Teaching and Learning,  
Austin Peay State University

Dr. Charmaine Lowe, assistant professor at AusDr. Charmaine Lowe, assistant professor at Austin Peay State University is unequivocal about the power of technology in the classroom. “Assistive and instructional technologies,” she says, “provide access to the general education curriculum through the collaboration of related professionals and caregivers. Classroom technology use establishes a consistent community of support for the child. There are mandated rules that these collaborators are obliged to play by so that all understand what their role is.”



Charmaine Lowe, Ed. D.

Communities need to be equipped, she continues, to educate children of all ability levels through the use of appropriate interventions and services, and by providing training and technical assistance to family members, educators, and others who support them. “AT levels the playing field in terms of information and access, which equips everyone vested in the success of a child to do their part so that an adversarial relationship does not exist.” In noting that all does not always run smoothly, she cautions, “Inclusion can be legislated, but hearts and morality cannot.”

Despite the advent of the digital age, “there’s a residual fear of technology in all segments of society,

including among some educators and administrators,” declares Dr. Lowe. “Many technophobes still don’t understand how technology is accessible or how the funding mechanisms work.” It’s one thing to mandate AT and its purchase by statute, she adds, “but there are still too many ways to avoid that purchase in some regions of the country, including ours.” The current economic crunch offers an escape hatch for technophobic educators and administrators looking to postpone or avoid an AT commitment, she alleges.

### The Importance of Technology for School Dependent Children

A sometimes overlooked factor in evaluating technology, Dr. Lowe says, is its disproportionate importance for children in lower income communities. “We are seeing an increase in the number of school dependent children, for whom the only source of socio-economic capital is the school. The school is the gatekeeper. Here in our region, school dependency is present among students who are rural and Caucasian as well as African American.” Data on Latino students so far is incomplete, she says.



“We are finding that even when economic parity exists among Caucasian parents and their minority counterparts, the middle class Caucasian students outperform other groups. What these groups have in common is that the parents are one generation removed from poverty and are unaware of how to provide supplemental educational opportunities to their children, including the opportunity to integrate technology in a way that’s academic into students’ home lives, including parents of children with disabilities.”



When technology does exist, she adds, “the same parents often fail to monitor its use by children. This failure is a major contributing factor to the discrepancy in academic achievement. Money, or its lack, is not a key factor if resources like AT and other technology are not understood and used in a focused and refined way.”

School dependent children, she remarks, “have little [non-school] exposure to the individuals who bring moralizing and socializing institutions into a community, including doctors, ministers, attorneys and other professionals.” However, she adds, when these individuals are no longer available to school dependent children, the children can have virtual access to them via technology. “This exposure enables these children to aspire to something more. When my family moved to Mississippi when I was a child, technology helped me gain access to adult professionals of various complexions. This exposure was especially valuable in the Deep South because it helped me understand at a young age that the world was not the black/white polemic that prevailed in that era.”

### “I Want to See Them in Classrooms”

Assistive technology, insists Dr. Lowe, has the potential to give multicultural learners, especially those with disabilities, a jump start toward advanced degrees and eventual teaching certification. “AT helps students with exceptionalities to go beyond the mandates of IDEA. The result is that some are now acquiring advanced degrees. As a teacher, I don’t only want to see learners with a disability getting through preservice programs; I want to see those students become certified teachers. I want to see them in classrooms. I have yet to see that hap-



pen. I see teachers who may have ‘invisible’ disabilities, but I’ve seen no teacher yet with an obvious physical disability who is leading instruction. I see them as guest speakers and community leaders, for instance, but not as consistent classroom instructors.

“When we envision inclusion we see males and minorities in education. That’s whom we try to attract, preferably those who are also multilingual, but we don’t think about teachers with physical disabilities. Their presence in the classroom would help normalize physical disability and would establish a baseline for interaction.

“When I was growing up I had no particular prejudice against children with disabilities, but they were shunted over to the side. I never saw them. They played by themselves at recess. I don’t think that there was an attempt at segregation, at least not at the schools I attended. Instead, it appeared to be more an attempt to protect the kids in special education from the presumed cruelty of the children in general education.”

The current statistics regarding bullying of children with disabilities continue to bear out that fear, she asserts. “I think more use and acceptance of AT would help temper that fear and soften the threat by establishing what is appropriate in terms of interactional style.”

AT, she adds, “would also help in establishing these children as intellectual authorities in the classroom when they join with a typically developing student in a collaborative learning project. AT integrates those students into the classroom and makes them equally responsible for the completion of assignments and coursework. They have all the rights and responsibilities everyone else has.”

## Her Preservice AT Training Goals

Success in including AT in classroom settings, Dr. Lowe says, depends in part on the availability and quality of preservice training. In developing her ideal AT-focused preservice training program, Dr. Lowe would begin by expanding the standard training that special education majors receive. “If students intend to make a career of working with children with exceptionalities they need thorough training.”

APSU’s College of Education, she points out, “is a teaching school, not a research institution. As such, we require two special education courses that are very generic. Students of mine who are deeply invested tell me they now think hard about how they might integrate AT into their classroom instruction.”

Dr. Lowe would mandate a course that covers the use of AT in general education. “I’d also mandate special education courses emphasizing mild to moderate and severe/profound disabilities; if those courses already exist I’d expand them and make them mandatory for everyone.”

She says that she would spotlight special education law. “I’d provide a history of inclusion, making a case for its benefits for marginalized individuals collectively, although there is stratification within the group. I’d make certain that my students know what the law is, what it guarantees and how we see the law in practice.”

Grant writing, she explains, would be added to her ideal preservice curriculum. “Successful grant writing can help secure funding for needed technology. Every preservice teacher would have to draft a grant. Grant writing would be mandatory for all grad students. The grant would have to be submitted, even if ultimately it is not funded.”

She would want all her students to attend IEP meetings. “I conduct mock IEP meetings and make them as raucous as practicable. I explain to my students that I need to equip them to work with parents who will be twice their age and may question their expertise and credentials. Everything I’ve recommended would be experienced by students before they go into the field.”

## Lengthy Field Placements; Masters of Technology

The curriculum she recommends would culminate in a lengthy field placement. Noting that APSU currently places students, including those in ELL courses, in the field for 10-15 hours, she says, “I’d make the entire course a field placement. For the first 2-3 weeks of class we’d meet on campus. Then I’d meet as a class at district schools, so we’re not just improvising.”

The class, she explains, “would work with students who use AT. My students would master the technology and figure out innovative ways to apply it. They’d journal, write and consider this from a theoretical perspective.”



Also, “because I believe in practical assignments, I’d want the course to culminate in collaborative student projects in which the preservice teachers enhance an existing form of AT – high- or low-tech – or they would invent a device. The students in the field would then utilize those enhancements or inventions and document the results. We can even talk about patents if the devices are very effective.”

The point, she emphasizes, “is that our students

have talents we're not tapping into. They are very creative and are far more astute technologically than many of the individuals who are teaching them."

### Highlighting the Production of Technology – and AT Research

Dr. Lowe advocates a more intense focus on digital literacy, not only social media, and its incorporation into accreditation standards. "I want to see AT included in those standards as well as education about the production of technology. There is a local community college here that is teaching its students how to create apps for iPhones and other Apple technology. I want our students to master technology, not just to stay abreast of it. I'll go a step further and say that I want our preservice students to be producers of technology. I want them to be technological innovators. I want them to be the leaders who are orchestrating trends, not just following them."

She hopes for a greater emphasis on research among graduate students. "More research would lend itself to other dimensions, such as multiculturalism. We need more ethnic integration. We need to adopt a more globalized view that is consistent with the development of 21st century skills."

Academic research on AT is a notoriously slow process, she notes, "because it's viewed erroneously as an impractical, esoteric concern when weighed against other obstacles that educators face. When there's a focus on technology it's usually on more visceral technology-related concerns, like cyberbullying and academic cheating, for example, or about kids who are cutting themselves or teen suicides or technology-facilitated sexual activity. None of these concerns are regulated by federal law, whereas the technology needs of students with disabilities are addressed by federal statute. On a state-by-state basis, however, the laws vary. In Tennessee

for example, there are no statutes mandating technology support for kids with disabilities."

The benefits of accelerated AT research she says, are spelled out by the National Council on Disability, which states, "For Americans without disabilities technology makes things easier; for Americans with disabilities technology makes things possible."

### Universal Design: Aspirational, but Practical

With technology a significant expense for financially hard-pressed school districts nationwide, she says, "Universal Design for Learning (UDL) is becoming very enticing, at least here in our region, to educators because economically we are struggling more than much of the nation."

Educators and administrators, she explains, view Universal Design as a more versatile approach to technology implementation in the classroom. "It has utility for all learners, those with disabilities and those who are typically developing. For students whose disabilities are not severe enough to qualify under IDEA definitions, UDL addresses their needs in a more substantive way."

UDL also reaches children from low socio-economic status (SES) backgrounds who are over-represented in special education programs, "which in our region often means students from rural areas or those who are non-native speakers of English. Because UDL is a mediating force, she continues, "we're finding that UDL utilization appears to reduce prejudice in the classroom."

For English Language Learners (ELL), she notes, UD and its AT component "promote fluency, vocabulary acquisition, comprehension, writing, study skills and enhance test-taking skills,



the elephant in the living room that all educators, administrators have to address.”

### **UDL and AT: Helping ELL Students Acquire Basic Skills**

UDL, she says, “establishes the technological foundation that results in the eventual acclimatization of students with disabilities and ELL students into the classroom community and normalizes the technology for teachers and for students with and without disabilities.”

Via AT and UDL, she points out, “ELL students acquire basic personal communication skills. AT and UDL help students with staggered educational patterns because those students are transient and migrate according to agricultural patterns.”

In fact, she reveals, “I’m nurturing a concept that would establish learning stations along major migratory routes to better serve students who are or will be transient. These stations will help them stay abreast of the curriculum.” AT facilitates this concept, she notes.

“We have many students who are transient through Tennessee. Much of the transience can be attributed to the students’ parents’ undocumented status. Most of the transients are Hispanics who have the ability to remain, physically, psychologically and linguistically connected to the parent culture.” Technology facilitates that allegiance to the parent culture while also enhancing their connectivity to U.S. culture, Dr. Lowe explains.

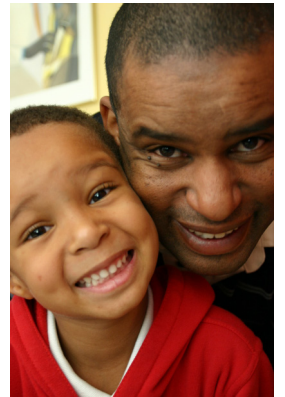
“I have students who will web-cam in. I say to them, ‘When you’re finished web-camming your family I have a podcast for you. Here’s a lesson and some assignments. Read this, watch that, work on this and send the completed assignment back to me from wherever you are.’”

That approach, she says, “has worked well for me. For instance, I have a grad student who’s in Hawaii with whom I continue to work intimately. I have my greatest rapport with this student. Technology facilitates that.”

In short, she states, “Universal Design gives educators and administrators more bang for the buck. With UD educators can aspire to an ideal while still achieving very practical goals.”

### **How Families Can Collaborate with Educators to Secure AT**

Parents, Dr. Lowe says, have several resources available to them when seeking AT for their children. “A quick search on the Internet can uncover numerous informational resources and can educate parents about their rights regarding assistive technology, specifically the right to have a representative accompany them to meetings with teachers and school administrators.”



To make sure parents in her area obtain the most knowledgeable representation, she encourages her preservice students to remain in touch with APSU after their graduation. “I caution them not to sever ties with us once they leave here; faculty can be brought in as advocates and experts. We love strengthening our ties with surrounding school districts; we enjoy helping parents.”

Most parents, she notes, “want to provide their children with a safe and loving home equipped when necessary with devices that enhance mobility and enhance play. We are socialized with play. AT in the home will help kids when they are home



to become integrated into their neighborhoods and will enable them to connect with the children with whom they'll be attending school in their community, in areas like ours where busing has been discontinued and private schools are no longer financially feasible for most families."

### Classroom Technology that Helps Families

AT utilized in the classroom by teachers can also be beneficial for families, Dr. Lowe says. "I'm a huge fan of the JAWS (Job Access With Speech) screen reader (<http://www2.lib.udel.edu/atc/jaws.pdf>) that provides individuals who are blind with access, via a PC, to software applications and the web while also providing outputs to refreshable Braille displays."

Zoom text, she notes, is helpful for students with visual impairments. Remote captioning is important as are amplification devices (<http://sped.wiki-dot.com/assistive-technology-for-students-with-hearing-impairments>), sign language interpreters (<http://www.atnet.org/resources/hearing/sign-lang-interpreters.php>) and captioning options for students with hearing impairments. She also appreciates Windows 7 with a touchscreen PC (<http://windows.microsoft.com/en-US/windows7/products/features/touch>). A program such as Kurzweil's 3000 text-to-speech (<http://www.kurzweilledu.com/default.html>) is not only applicable for students with exceptionalities but also for English language learners."

The emphasis on such products, she concludes, represents the approach that is most likely to result in the universal integration of AT into standard classrooms. "In the end, practicality and effectiveness will win the day for AT and for the children who need it."

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## RESOURCES

### ARTICLES

#### The Integration of Assistive Technology into Standard Classroom Practices

By Charmaine Lowe, Ed. D. and Moniqueka Gold, Ed. D.

Journal of Multiculturalism in Education (2010)

The authors, both of whom are professors at Austin Peay State University's College of Education, suggest methods to more easily facilitate the integration of AT into K-12 classroom practices. AT integration in classrooms, the authors insist, is becoming more prevalent among general educators, special educators, paraprofessionals and administrators as inclusive classrooms proliferate. The authors urge more comprehensive and intense training in the use of AT devices via resources such as the Internet, face-to-face training sessions and statewide Parent Training and Information Centers.

<http://www.multiculturaljournal.com/volumes/6/pdf/gold.pdf>

#### Core Strategy: Technology Integration

Edutopia (2010)

This collection of articles and videos spotlights the benefits of technology integration for K-12 classrooms. The collection includes samples of best case classroom technology scenarios as well as links to technology integration resources.

<http://www.edutopia.org/tech-integration>

#### Suggestions for Integrating AT into the Classroom

By Susan Wulczyn

District 113A, Lemont, Illinois (2011)

The author has created a chart with examples of assistive technology applications for reading and writing tasks that can be integrated into lesson plans. Ms. Wulczyn's chart matches the AT with appropriate tasks and identifies expected ben-



efits to students. <http://www.sdl13a.org/vnews/display.v/SEC/Front%20Page%7CStudent%20Services%3E%3EAssistive%20Technology>  
 SC Curriculum Access through AT  
 South Carolina Assistive Technology Program  
 (2010)

The article summarizes the value of integrated classroom AT and features links to videos demonstrating AT use by students. The authors also include the following principles for integrating AT into the classroom:

1. A student-centered team should develop a plan for AT implementation.
2. Teachers and therapists must have time to plan instruction using the AT in the classroom.
3. The AT and supporting materials should be age-appropriate and motivating to the individual student.
4. Students and staff should have time to learn to use the AT before it is introduced into the daily classroom routine.
5. AT should be easily accessible within the classroom.
6. School staff must have time to create materials that are specific to the curriculum.
7. Training and technical support must be easily available.
8. Students need support from their classmates.
9. Students, teachers, therapists and parents need access to others who are using the AT successfully.
10. The value of support from parents or caregivers cannot be overestimated.
11. Regular education staff must have special education support for student expectations, accommodations guidance and material preparation.
12. Administrative support makes all the difference.
13. An AT team coordinator saves time, effort and discouragement.
14. Procedures should be set in place for ongoing evaluation and documentation of assistive tech-

nology effectiveness.

15. Using assistive technology in settings other than the classroom is a powerful way to provide continuity of learning.

<http://www.sc.edu/scatp/cdrom/integratingat.htm>

## WEBSITES

### **Tech-ease 4 All: For All Your Classroom Technology Needs**

This site focuses on features that facilitate easier in-class and at-home computer use without necessitating the purchase of additional software or hardware. This website is a collection of tutorials and directions, in a variety of accessible formats (video, large video, print directions in PDF format, and tagged HTML), that address the universal access features in Mac OS X and Ease of Access in Windows 7. <http://etc.usf.edu/techease/4all/>

### **Class Act: Access for Deaf and Hard of Hearing Students**

Class Act is a new program developed by Rochester Institute of Technology (RIT) to increase training for teachers in postsecondary classrooms that include deaf or hard-of-hearing students. The site also has utility for students, parents, interpreters, notetakers, captioners and those who coordinate support services for college level deaf/hard-of-hearing students and is useful in preparing students for transition from high school to college. The website's sections include:

- An overview of the accessibility needs of deaf or hard-of-hearing students
- Challenges and strategies
- Videotaped recordings of students and teachers describing some of the issues related to deaf/hard-of-hearing students in a postsecondary classroom and how those issues can be resolved
- Tools, including a PacerSpacer which uses animation within a PowerPoint presentation to

help teachers pause before speaking as each new screen appears on an overhead

<http://www.rit.edu/ntid/drt/classact/>

### “Greatest Hits” for Special Educators

This website features numerous links to resources, most of which are free. Despite its title, the website would be useful not only to special educators, but to general educators and parents as well. Resources include:

- Instructional materials, including audio books and e-texts
- Instructional strategies and reproducible resources, including links to classroom lessons, printable sheets for classroom activities and games that are switch-accessible
- Graphics, including links to clipart, images, story-making applications, mouse programs, keyboarding activities, screen readers and academic areas such as spelling, ELA (English/Language Arts).

The site also spotlights disability, legal and policy information, links to information about AT and areas devoted to professionals, parents and students.

[http://www.aces.org/departments/pupil\\_services/documents/Greatest\\_Hits.doc](http://www.aces.org/departments/pupil_services/documents/Greatest_Hits.doc)

## BOOKS

### The Amazing Web 2.0 Projects Book

By Terry Freedman - ICT in Education (2010)

The author highlights 87 case studies compiled by 94 educators using Web 2.0 projects. The book, which covers 52 applications, offers advice, insight and resources for teachers integrating Web 2.0 applications into their classrooms while aiming to make the Web 2.0 approach user-friendly for teachers. The book is available free of charge and is downloadable at <http://www.ictineducation.org/free-stuff/> . <http://www.ictineducation.org/home-page/2010/3/15/free-web-20-projects-book-now-available.html>

## KNOWLEDGE NETWORK MEMBERS

### IRIS Center for Faculty Advancement

The IRIS Center places special education content into interactive web-based learning modules. IRIS modules



incorporate the STAR Legacy model ([http://www.answersforspecialkids.org/answers\\_for\\_special\\_kids/2010/01/star-legacy-modulescollaborating-with-families-and-youre-in-charge-developing-your-own-comprehensive-behavior-management.html](http://www.answersforspecialkids.org/answers_for_special_kids/2010/01/star-legacy-modulescollaborating-with-families-and-youre-in-charge-developing-your-own-comprehensive-behavior-management.html)) which integrates a problem-solving approach initiated with a challenge for students to resolve. A Resource Locator on the IRIS website has an AT component, offering free access to case studies, activities, information briefs, podcasts, an online dictionary and other resources. Although developed for preservice preparation, these materials are in use in several states for professional development of general and special educators, administrators and related service personnel. For additional information, contact:

IRIS Center for Faculty Advancement

Vanderbilt University Peabody College, Box 275  
Nashville, TN 37203

Phone: (615) 343-6006 (800) 831-6134

Fax: (615) 343-5611

Contact: Naomi C. Tyler, PhD, Co-Director

Email: [iris@vanderbilt.edu](mailto:iris@vanderbilt.edu)

<http://iris.peabody.vanderbilt.edu/>

### Pennsylvania Deafblind Project (PDP)

PDP provides the following services to professionals entrusted with the education and care of deafblind children and youth:



- Comprehensive training and technical assistance to educators, service providers, paraeducators, interveners, school psychologists and families regarding evidence-based strategies to support the academic achievement and educational outcomes of children with deafblindness
- Collaboration with local, state and national entities to implement evidence-based practices for access to natural environments, routines and the general education curriculum
- Establishment of competencies and a credential for educators of children and youth who are deafblind
- Establishment of competencies for paraeducators and a credential for interveners
- Development and expansion of its Family Leadership Network and mentoring capabilities.

For more information contact:

Pennsylvania Deafblind Project

Phone: (800) 446-5607 TTY: (412) 826-2338

Fax: (412) 826-1964

Contact: Juli Baumgartner, Project Coordinator

Email: [jbaumgarner@pattan.net](mailto:jbaumgarner@pattan.net)

<http://www.pattan.net/teachlead/specialprojects4.aspx>

### Advocates for Justice and Education, Inc. (AJE)

Based in Washington, DC, AJE provides information to parents and professionals who work with parents, about laws governing special education and related services and about the consequences of institutional negligence and/or inappropriate classification of students with special needs. The organization also advocates for appropriate educational placements and related services and for appropriate diagnosis and classification of students with special needs. Additional AJE programs and services include a parent-to-parent program, a par-



ent training and information center (PTI), a transition advocacy project, direct services/individual advocacy and community education. For further information, contact:

Advocates for Justice and Education, Inc.

2041 Martin Luther King Jr. Ave., SE Suite 205, DC 20020

Phone: (202) 678-8060 (888) 327-8060

Fax: (202) 678-8062

Contact: Kim Jones, Executive Director

Email: [kim.jones@aje-DC.org](mailto:kim.jones@aje-DC.org)

<http://www.aje-dc.org/>

### Technology for Independence: a Community-Based Resource Center (TI CBRC)

TI CBRC facilitates the development of real-world, scientifically rigorous knowledge and research on assistive technology and environmental access for persons with disabilities in partnership with disability researchers, disability advocates, community-based organizations, and other disability community members. The organization's activities include training opportunities for community-based organizations to conduct and evaluate research; participatory action research as a methodology in disability research; dissemination of research findings and resources on AT; and provision of technical assistance on AT and environmental access. For more information, contact:



TICBRC

University of Iowa College of Law; Law, Health Policy & Disability Center; 280-1 Boyd Law Building, IA 52242-1113

Phone: (319) 335-8469 (319) 353-5828 (TTY)

Fax: (319) 335-9764

Contact: David Klein, Associate Director of Tech-

nology

Email: [david-klein@uiowa.edu](mailto:david-klein@uiowa.edu)

<http://disability.law.uiowa.edu/cbrc/>

### Lemelson AT Development Center (LATDC)

LATDC provides students with an experiential education in applied design, invention, and entrepreneurship through engagement in assistive technology and universal design problem-solving. Teams of students design and develop AT for worldwide use. The center offers courses, activities, internships and collaborations with business and non-profit organizations. For further information, contact:

Lemelson AT Development Center

Hampshire College-LM, 893 West Street, MA 1002

Phone: (413) 559-5613

Fax: (413) 559-5834

Email: [rlfLM@hampshire.edu](mailto:rlfLM@hampshire.edu)

<http://disability.law.uiowa.edu/cbrc/>



### Assessment & Accountability Comprehensive Center (AACC)

AACC is part of a federal technical assistance system that includes four other Content Comprehensive Centers, the Regional Education Laboratories, and research and technical assistance centers focusing on the needs of English language learners and students with disabilities. AACC: identifies and evaluates relevant research studies and other technical assistance resources; synthesizes across bodies of research; benchmarks and identifies best practices; designs materials, training, and other



resources useful for those working with state and district education systems; and disseminates such knowledge and resources. AACC reviews include an analysis of context factors that affect program and resource success including environmental conditions, readiness factors, and essential support systems. For further information, contact:

Assessment & Accountability Comprehensive Center

Phone: (415) 615-3154

Contact: Stanley Rabinowitz, Director

Email: [srabino@wested.org](mailto:srabino@wested.org)

<http://www.aacompcenter.org/cs/aacc/print/htdocs/aacc/home.htm>

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