What is Universal Design for Learning (UDL)?

The term "Universal Design" is defined in federal laws (Assistive Technology Act of 2004, Individuals with Disabilities Education Act IDEA 2004) as "a concept or philosophy for designing and delivering products and services that are usable by people with the widest possible range of functional capabilities, which include products and services that are directly accessible (without requiring assistive technologies) and products and services that are interoperable with assistive technologies." Speakerphones, audio-books, and close-captioned TV are everyday examples of universal design. For learning differences, a good UDL curriculum has pre-planned, built-in options, such as, adaptations to text, speech, video, audio, seating options, software, and classroom tools so that students can interact with academic content using multiple senses, aligned to their individual learning preferences. Proper AT can support a high level of independence, school success, and UDL design while maintaining high learning expectations.

Principles of UDL

1. Provide Multiple Means of Representation— (the "what" of learning). Embedding multiple means of representation into curriculum assists students with disabilities in accessing the traditional "print" curriculum, such as textbooks.

2. Provide Multiple Means of Action and Expression— (the "how" of learning). Students differ in the ways that they can navigate a learning environment and express what they know. Students with disabilities may struggle with strategic and organizational abilities or have language barriers, will demonstrate their mastery differently.

3. Provide Multiple Means of Engagement— (the "why" of learning). Students differ markedly in the ways in which they can be engaged or motivated to learn. Some may desire strict routines and predictable activities while others are highly engaged by spontaneity and novelty.

Assistive Technology can benefit a variety of individuals including those with:

- Autism
- Learning disabilities
- Neuromuscular impairments (i.e. Muscular Dystrophy, Spinal Muscular Atrophy, Cerebral Palsy)
- Intellectual disabilities
- Visual impairments (i.e. Low vision, Cortical Visual Impairment, Blindness)
- Communication impairments
- Acquired Brain Injuries (i.e. Traumatic Brain Injury, Anoxic Brain Injury)
- Neurodevelopmental disorders (i.e. Rett Syndrome)
- Degenerative Nervous System Diseases (i.e. Huntington's Disease, Creutzfeldt–Jakob disease)
- Spinal Cord Injury

At Conaboy & Associates, we believe Assistive Technology can support learning, playing, working and participating in daily living and everyday routines by bridging the gaps to independence.

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At Conaboy & Associates, we believe children who learn together, live together. We are dedicated to a quality of life for all.
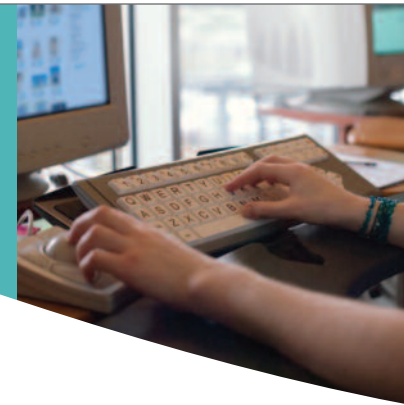
technology services

our technology services

Assistive technology (AT) can be 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 individuals with disabilities. At Conaboy & Associates, we believe in infinite possibilities for creative home, classroom, and work space design that can support a child's availability to access learning, a teachers ability to maximize potential, and a young person's ability to participate in his community or career. While AT can be an invaluable addition to anyone's life, it can be intimidating, challenging, and expensive. We work with families, teachers, students, school leaders, and work sites on developing effective strategies to support a person's success and are dedicated to utilizing a range of approaches and solutions. We have a team of Assistive Technology Professionals (ATP) who are also trained in Education, Recreation Therapy, Physical Therapy, Occupational Therapy, and Speech-Language Pathology providing a rich context to see clients from a holistic, ability perspective.

Assistive Technology Evaluations and Services

include a comprehensive process involving:
• Assessment data
• Home and school recommendations
• Training for staff and caregivers
• Maintenance support
• Support in navigating the health care and educational funding and paperwork systems

We specialize in:

Augmentative and Alternative Communication (AAC):
• High tech and low tech devices
• Side by side comparison of the latest devices
• Picture Communication Symbols (PCS) in communication systems and schedules to increase communication
• Voice Output Devices (VOD)
• Relationships with quality vendors

Computer Access:
• Adaptive keyboard
• Adaptive mouse
• Touch screens
• Switch access
• Screen Magnification
• Modified Word Processors
• Speech to Text software

Electronic Aids to Daily Living (EADL):
• Intercom systems
• Voice amplification systems
• Controls for lights
• Infrared controls for devices controlled by a remote: TV, DVD, fans, stereos

Educational Support Software:
• Word Prediction
• Text Readers
• Talking word processors
• Electronic Graphic organizers
• e-books
• Curriculum support
• Social skills software
• Educational applications

Mobility Needs:
• Determine optimal posture, mobility, and safety needs
• Power wheelchair
• Power assist wheelchair
• Integration of wheelchair and technology devices

Switch Access and Engineering:
• Determine the optimal site and type of switch
• Switch activated toys
• Power wheelchairs
• Computer controls
• Remote controls
• Computer software
• Games and recreation

School Consultation:
• Comprehensive evaluation of a child's technology needs
• Recommendations for success using components of universal design for learning (UDL)
• Classroom re-engineering
• Reading, writing, math, learning, and social skills software
• Free, handmade, no-tech, low-tech, and high tech strategies to access curriculum
• Inclusion support and teacher training

Home Consultation:
• Assist in home engineering to support access and universal design components
• Adapt household devices such as remote controls, telephones, or smart phones
• Academic support recommendations for carryover of learning and access needs
• Caregiver training