Navigating Ethics

The Intersection of Assistive Technology, the Internet, and Artificial Intelligence

WisTech Assistive Technology Program

WISCONSIN DEPARTMENT of HEALTH SERVICES

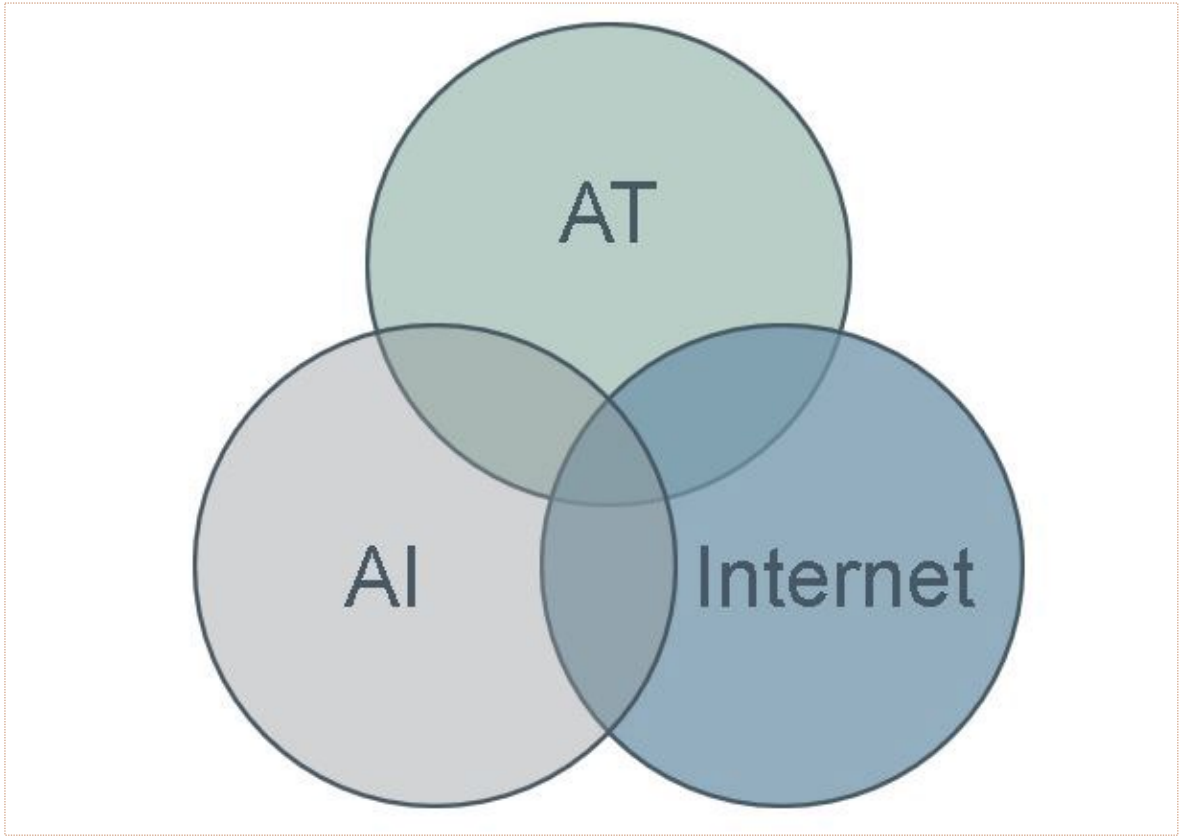
Introduction

- Laura Plummer, MA, CRC, ATP
- Statewide AT Program Coordinator; Wisconsin Department of Health Services
- Adjunct Faculty; Northern Arizona University
- AT Specialist; Collaborative Technology Solutions
- Disclosure: Received salary for the positions listed above.

Learning Objectives

- Participants will be able to list three ethical best practices for assistive technology services.
- Participants will be able to list three ethical decision-making models as they apply to AT, the internet, and AI.
- Participants will apply AT service provision criteria and how they are covered by the CRC Code of Ethics, RESNA Standards, and WisTech Best Practices.

Intersections



Definitions

ASSISTIVE TECHNOLOGY

ARTIFICIAL INTELLIGENCE

ETHICS

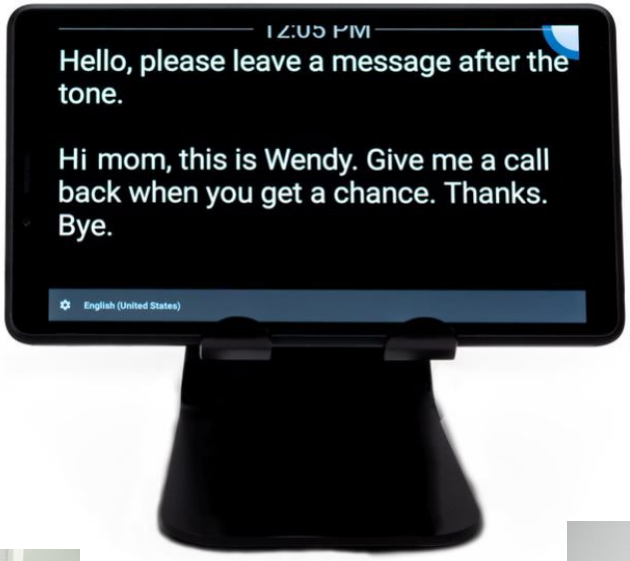
Assistive Technology

Assistive technology (AT) is any product or piece of equipment used to maintain or improve the functional capabilities of people with disabilities.

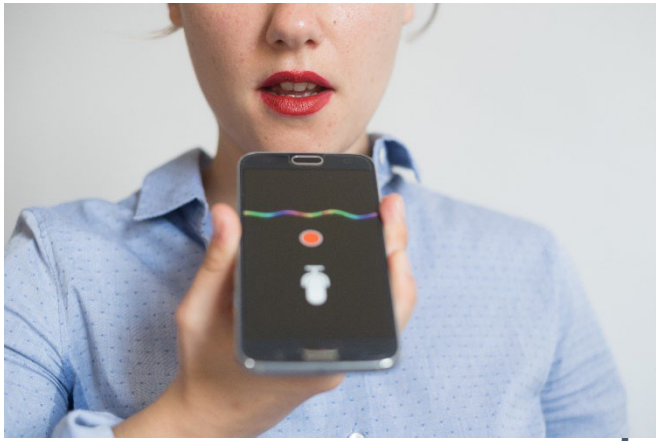
- AT services include: evaluation, funding, design, customization, modification, maintenance, repair, training, and technical assistance.

AT Examples

TUE
9
1:30
Eau Claire
55° Partly Cloudy
H:57° L:27°

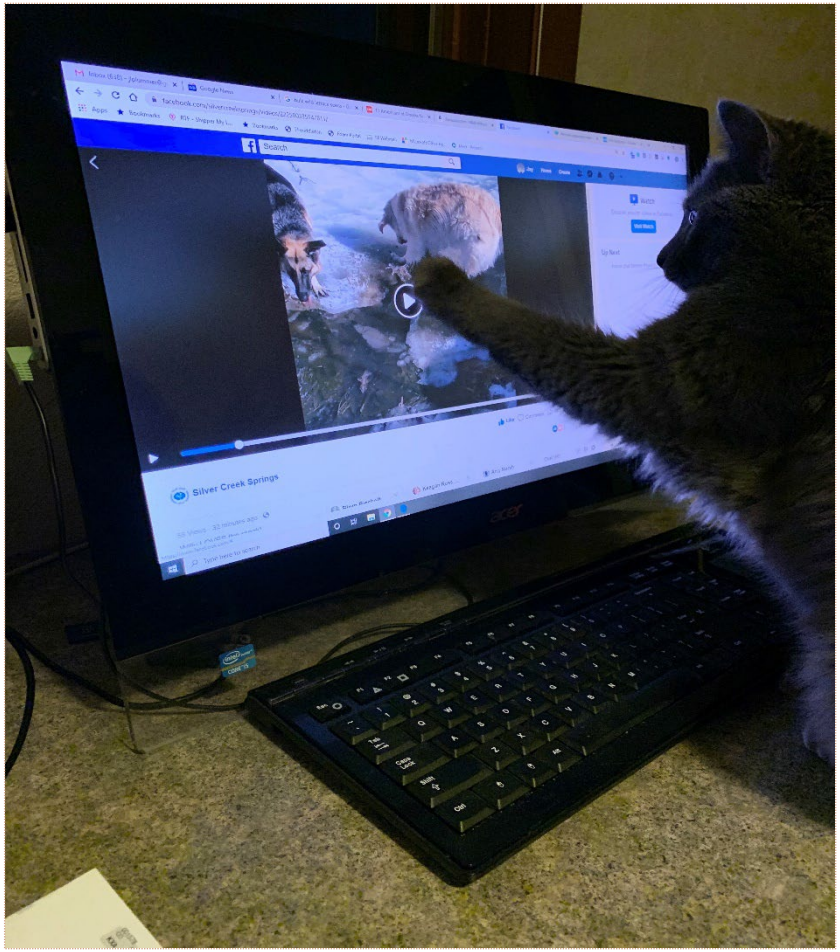

12:05 PM
Hello, please leave a message after the tone.
Hi mom, this is Wendy. Give me a call back when you get a chance. Thanks. Bye.
English (United States)

Our test and exper
committed writing
work the same way
When you've fi



The Internet

Network of networks



Artificial Intelligence

Traditional	Generative
• Analysis of data • Automation or process • Rules and patterns • Tasks (lane assist, fraud detection, spam filters)	• Analysis of patterns to predict • Does not distinguish between true and false • Guided by prompts and instructions

AI Tools

Your Experience with AI?

A. None – Never used it, vaguely heard of it
B. Just curious – I've played around with it a few times.
C. Occasional user – I use it once in a while for work or fun.
D. Frequent user – I regularly use it for personal or professional tasks.
E. Power user – I explore advanced uses like prompting strategies, fine-tuning, or AI-integrated tools.

AT and AI Integration: The Good

- Personalization and adaptability
- Improved accuracy and efficiency
- New AT solutions
- Endless possibilities for development
- Enhanced communication
- Improved accessibility
- Productivity versus motivation (Harvard article)

AT and AI Integration: The Not So Good

- Data privacy and security
- Bias and fairness
- User-centric design (or lack thereof)
- Digital literacy
- Impacts to personal choice and decisions
- Does not distinguish between true/false/right/wrong
- Lack of critical thinking (Time article)
- Environmental concerns
- Impact to search engines (MIT article)

AI and AT: Service Delivery

- Notetaking
- Research
- Composing
- Instructions
- Training materials
- Graphics
- Assessment
- And much more

AT and AI: Communication

- AI-powered speech recognition.
- AAC device features can increase speed and accuracy.
- Predictive text, word completion, content generation.
- AI-powered real-time captions for videos and transcripts for audio content.
- Sign Language Translation: AI can translate spoken or written language into sign language, facilitating communication for the Deaf community **(Inaccurate information provided by AI).**
- AI-driven emotion recognition in educational environments can improve learning outcomes by assessing and interpreting students' emotional states.

Communicate

zoom

CHAT GPT

Xander Video

AT and AI: Mobility and Navigation

- Navigation tools help with identifying obstacles and providing turn-by-turn directions.
- AI is being integrated into wheelchairs and prosthetic limbs to make them more adaptive and responsive to the user's movements and environment.
- AI improves the accuracy of eye-tracking devices to enhance the control of computers and other devices.
- "Self-driving" Mobility Aids: Devices like "Glide" use AI to guide users through their environment with haptic signals, reducing the need for training. **(Need to fact check).**

Waymo

Waymo Video

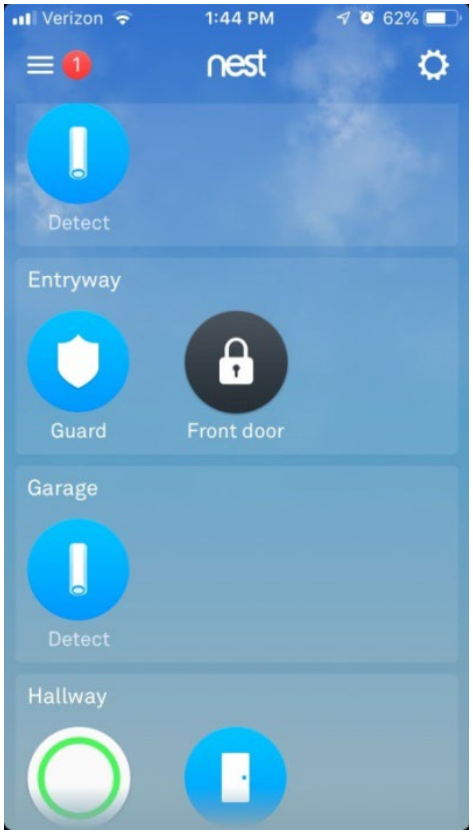
AT and AI: Executive Functioning

- AI-powered tools can adapt to a person's learning style and needs, offering personalized tutorials, explanations, and exercises.
- Generative AI tools can break down complex assignments into smaller steps, create personalized schedules, and provide reminders.
- AI tools can read digital content aloud, adjust text size, and summarize lengthy documents, aiding individuals with reading difficulties or cognitive disabilities.
- Wearable devices and voice AI assistants can provide reminders for daily tasks and appointments, supporting individuals with memory issues.

AT and AI: Daily Living

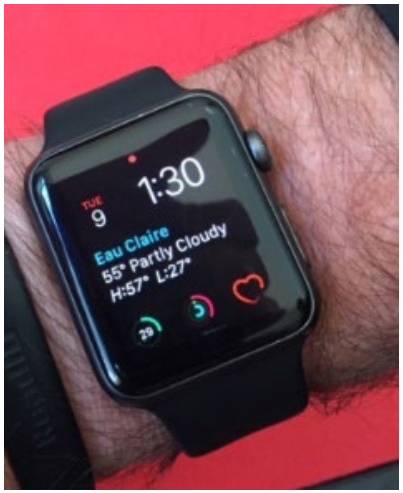
- AI-powered smart home devices to control various aspects of their homes.
- Smartwatches and fitness trackers can monitor vital signs, track medication schedules, and detect falls, sending alerts to caregivers or emergency services.
- AI algorithms can analyze user data and patterns to predict user intentions or actions, potentially benefiting individuals with motor disabilities or cognitive impairments in controlling devices.
- AI technology can help identify barriers in different physical environments for people with vision impairments.

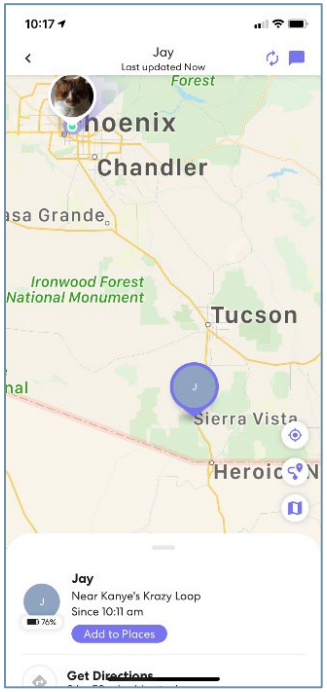
Smart Technology



IFTTT
ifthisthenthat

AI and AT: Safety





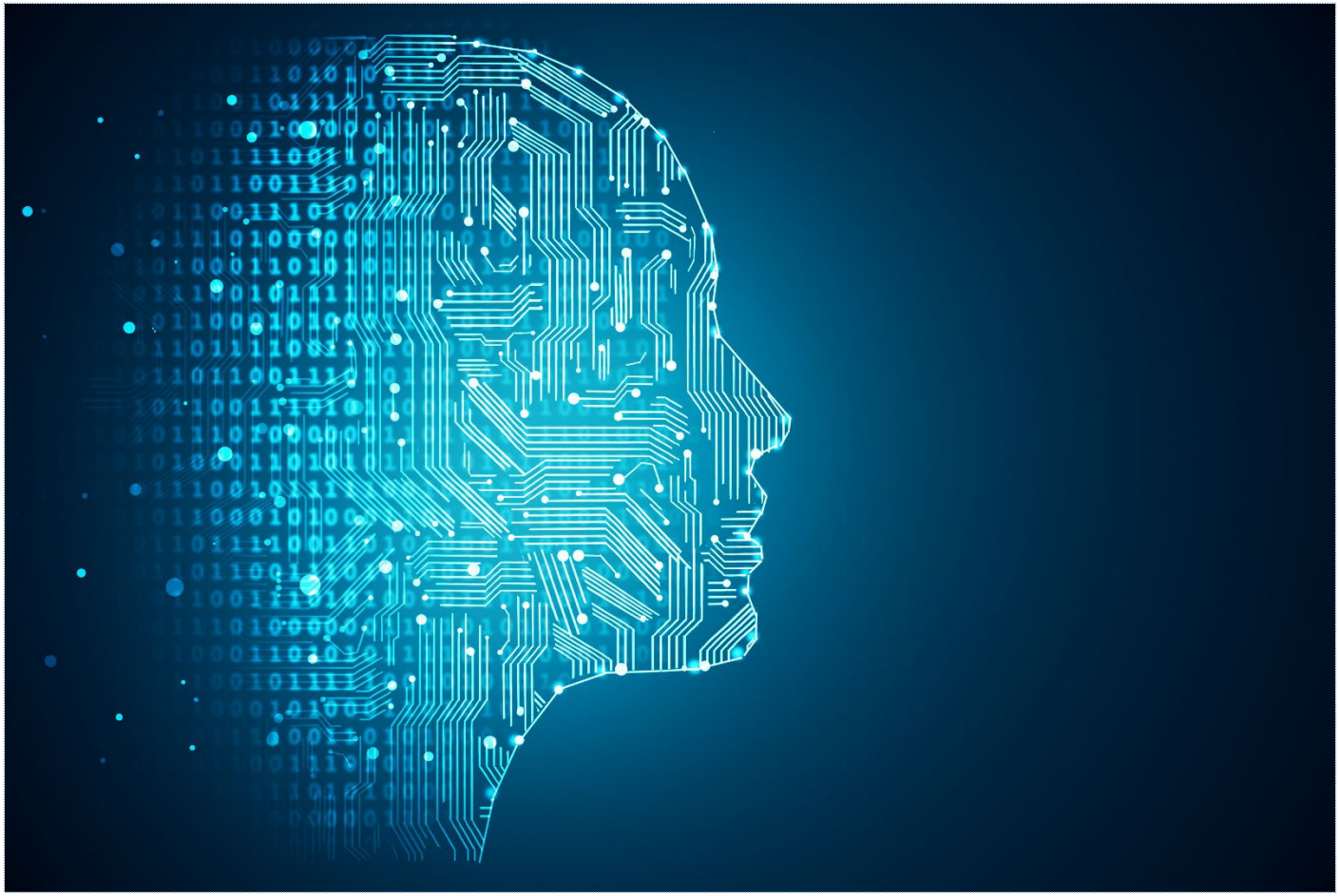
Meta Glasses

- Meta Accessibility Video
- Meta Translation Video

AT and AI: Healthcare and Services

- Diagnostic imaging and analysis
- Electronic medical records (not always correct).
- Support for dementia and memory loss with AI tools for monitoring and med management.
- AI-powered robots are being explored for use in autism therapy to improve social and cognitive skills in children.

Your Thoughts and Uses?



Back to Ethics

\'e-thiks\

- a set of moral issues or aspects (such as rightness)
- the discipline dealing with what is good and bad and with moral duty and obligation
- the principles of conduct governing an individual or a group
- a guiding philosophy

* Merriam Webster

CRC Code of Ethics

- The Counseling Relationship
- Confidentiality, Privileged Communication, and Privacy
- Advocacy and Accessibility
- Professional Responsibility
- Relationships with Other Professionals
- Forensic Services
- Assessment, and Evaluation
- Supervision, Training, and Teaching
- Research and Publication
- Technology, Social Media, and Distance Counseling
- Business Practices
- Resolving Ethical Issues

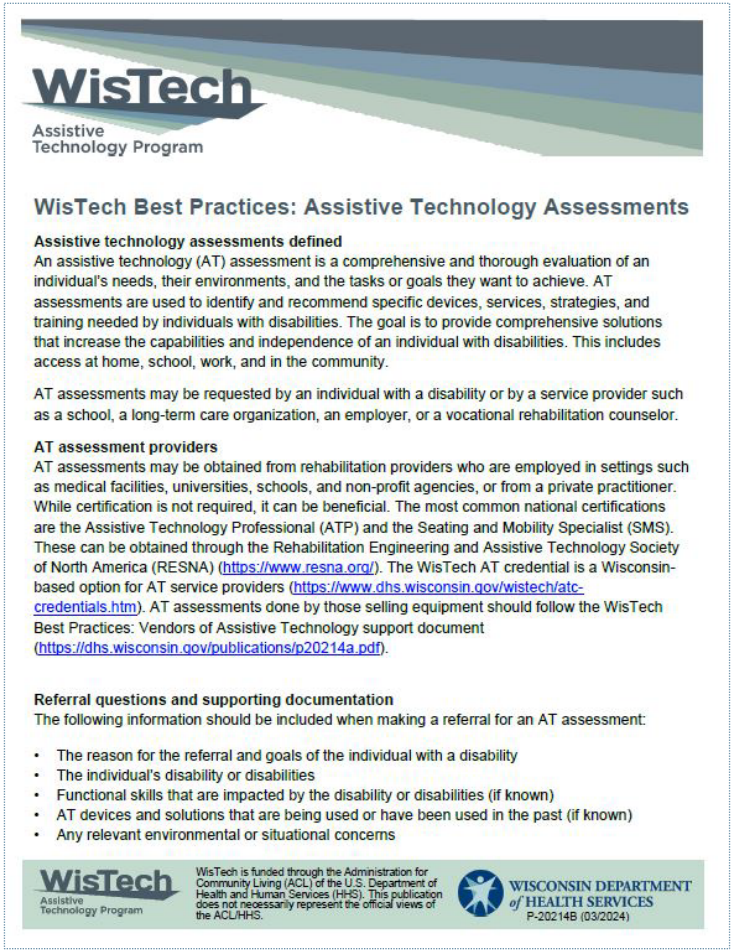
(CRC Code of Ethics)

RESNA Standards

1. Verify a consumer's needs by using **direct assessment procedures.**
2. Engage in only those services within the **scope of their competence**, level of education, experience, and training, recognize the limitations imposed by the extent of their personal skills in any professional area, and as listed in the Directory of Certified Professionals.
3. **Abide by all laws**, regulations, and policies that govern the provision of assistive technology products and services and provide consumers with the applicable information to **make informed decisions**.
4. **Refer consumers to other professionals**, including assistive technology professionals, or provide resources, when necessary to meet the consumers' identified needs.
5. Work in a **collaborative manner** with all stakeholders.
6. Perform or participate in the **steps of the assistive technology process**, which may include assessment, evaluation, trial, simulation, recommendations, procurement, delivery, fitting, training, adjustments, repairs, and/or modifications.
7. Consider the **consumer's current, future, and potential emerging assistive technology needs** when making recommendations.

- Standards of practice

Best Practices - Wisconsin



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WisTech Best Practices: Assistive Technology Assessments

Assistive technology assessments defined
An assistive technology (AT) assessment is a comprehensive and thorough evaluation of an individual's needs, their environments, and the tasks or goals they want to achieve. AT assessments are used to identify and recommend specific devices, services, strategies, and training needed by individuals with disabilities. The goal is to provide comprehensive solutions that increase the capabilities and independence of an individual with disabilities. This includes access at home, school, work, and in the community.

AT assessments may be requested by an individual with a disability or by a service provider such as a school, a long-term care organization, an employer, or a vocational rehabilitation counselor.

AT assessment providers
AT assessments may be obtained from rehabilitation providers who are employed in settings such as medical facilities, universities, schools, and non-profit agencies, or from a private practitioner. While certification is not required, it can be beneficial. The most common national certifications are the Assistive Technology Professional (ATP) and the Seating and Mobility Specialist (SMS). These can be obtained through the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) (https://www.resna.org/). The WisTech AT credential is a Wisconsin-based option for AT service providers (https://www.dhs.wisconsin.gov/wistech/atc-credentials.htm). AT assessments done by those selling equipment should follow the WisTech Best Practices: Vendors of Assistive Technology support document (https://dhs.wisconsin.gov/publications/p20214a.pdf).

Referral questions and supporting documentation
The following information should be included when making a referral for an AT assessment:

- The reason for the referral and goals of the individual with a disability
- The individual's disability or disabilities
- Functional skills that are impacted by the disability or disabilities (if known)
- AT devices and solutions that are being used or have been used in the past (if known)
- Any relevant environmental or situational concerns

WisTech Assistive Technology Program
WisTech is funded through the Administration for Community Living (ACL) of the U.S. Department of Health and Human Services (HHS). This publication does not necessarily represent the official views of the ACL/HHS.
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P-20214B (03/2024)

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WisTech Best Practices: Vendors of Assistive Technology

Assistive technology (AT) is any product or piece of equipment used to maintain or improve the functional capabilities of people with disabilities. AT services can include any or all of the following: evaluation, funding, design, customization, modification, maintenance, repair, training, and technical assistance.

AT devices may be purchased or obtained from any of the following:

- Medical equipment dealers
- Manufacturer representatives
- Donation programs
- Non-profit agencies
- Online stores
- Private sales

Decision making for AT devices and solutions may be based on any of the following:

- AT was recommended through a professional assistive technology assessment.
- AT was recommended or prescribed by a rehabilitation specialist, speech language pathologist, occupational therapist, or physical therapist.
- AT may have been demonstrated or loaned to an individual to try out.
- Product research online, at a community event, or in a retail store.
- An AT product demonstration or through word-of-mouth.
- AT might have been suggested by a product vendor.
- Current AT may need replacing or updating.

Consumer protection
- AT is a consumer product and Wisconsin consumer protection information applies. https://datcp.wi.gov/Pages/Programs_Services/ConsumerProtection.aspx
- Wheelchair Lemon Laws: Wisconsin Stat. § 134.87 entitles owners of eligible DME that meets the statutory definition of a "lemon" to a refund or a replacement.

Qualifications of vendors
Vendors must have sound knowledge of anatomy, physiology, disabilities, and disease processes. This knowledge should relate to the technical aspects of the AT and durable medical equipment (DME) they provide. Vendors are expected to engage in ongoing learning to maintain and increase their knowledge. This could be done through conferences, courses, trade shows, and research.

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Best Practice Handouts

- WisTech website
- Click WisTech Brochures dropdown
- Scroll to the AT Best Practice documents (Assessments and Vendors)

ACVREP Codes of Ethics

- ACVREP's certification programs are designed to offer Vision Impairment Specialists, who provide services to individuals who are blind or have low vision, the means to demonstrate critical knowledge and skills that promote the provision of quality services and ethical practice.
- ACVREP's commitment to quality builds confidence and trust in both employers and individuals seeking and receiving services from Vision Impairment Specialists

- Certified Low Vision Therapist (CLVT)
- Certified Orientation and Mobility Specialist (COMS)
- Certified Vision Rehabilitation Therapist (CVRT)
- Certified Assistive Technology Instructional Specialist for People with Visual Impairments (CATIS)
- Certified Deafblind Intervenor Specialist (CDBIS)

Educator Ethical Guidance

- Council for Exceptional Children Code of Ethics
- Professional special educators are guided by the CEC professional ethical principles, practice standards, and professional policies in ways that respect the diverse characteristics and needs of individuals with exceptionalities and their families. They are committed to upholding and advancing the following principles:

Principles of Ethics

- **Autonomy:** To respect the rights of clients to be self-governing within their social and cultural framework
- **Beneficence:** To do good to others; to promote the well-being of clients
- **Fidelity**: To be faithful; to keep promises and honor the trust placed in CRCs/CCRCs
- **Justice:** To be fair in the treatment of all clients; to provide appropriate services to all
- **Nonmaleficence:** To do no harm to others
- **Veracity:** To be honest and truthful

Commonalities: Breaking it Down

- Collaborate with individuals and their people to determine needs and interventions, not dictate solutions.
- Non-discrimination. Value all clients, students, families. Not making assumptions.
- Confidentiality. Keeping info about the person private and secure. Papers, notes, emails, records.
- Keeping your professional relationship with the person private.
- Keeping their data private when dealing with technology. Accounts, emails, apps, AI.

Commonalities Continued

- Consult with others when outside your knowledge and refer when outside your scope or knowledge. In addition, is it your job?
- Keeping learning about technology and your field to maintain best practices.

Decision Making Model Themes

- Recognizing and identifying the problem
- Collaborating with the colleagues or the client to further define the problem
- Developing and choose a solution
- Implement that chosen solution
- Review the outcomes of that choice
- Continue to evaluate and reflect

Corey Model

- Identify the problem or dilemma
- Identify the potential issues involved
- Identify the ethical principles and prioritize
- Review relevant ethical guidelines (policies, codes, and laws)
- Obtain Consultation
- Consider possible courses of action
- Consequences of the possible actions
- Decide and document reasons behind the decision

Good Reason Approach

- Known as the Golden Rule
- What would you want someone to do to you, your spouse, sibling, parent, etc.?
- Which choice would be the least harmful?
- Would I want what I was doing published in the newspaper?
- Would I like my family to know?
- Will it make me proud?
- Is it legal?
- What effect will it have on the behavior of others?
- How will I feel?

RAD Process (AT and Service Decisions)

- What is the need, goal, problem?
- Does it relate to consumer's assessment, service plan, or desired outcomes?
- How could the need be met?
- What policy guidelines apply?
- What is the preferred option (consumer)?
- What is most cost effective and efficient?
- Explain, dialogue, negotiate

Ethical Consideration Discussion

Case Study 1

- Two clients are working toward the same career goal. One is highly tech-savvy and uses ChatGPT to improve their resume, practice interviews, and analyze job descriptions. The other does not use AI and progresses more slowly. The counselor wonders whether to recommend AI use to even the playing field—or let clients self-direct their tool use.
- Thoughts on the case or how it was written?

Case Study 2

- A VR agency lacks a formal policy on AI. One tech-savvy team member starts using ChatGPT to generate everything from workshop flyers to intake forms. Another team member is concerned about copyright, bias, and data privacy—but also notices that the materials are clearer and more engaging than before.
- Both agree the tools are helpful—but disagree on whether to keep using them without agency-level guidelines

Case Study 3

- A job seeker has applied for many positions and had not been selected for an interview. This person has developed their resume and letter to align with the job posting.
- The dates for when they graduated from school are noted on the resume and one of their professional activities serving on the Board for a disability organization.

Decision Reflections

- May be uncomfortable / may not feel good to make the right decision
- May involve choosing between two unappealing options
- Requires counselors to think of how the profession is trusted and perceived by the public
- May have to deal with uncertainty…there might not be a “right” answer

Cautionary Wrap Up

- Don’t share sensitive information
- Human oversight is essential
- Plan for an iterative process
- Use AI to enhance outcomes, not just for convenience
- Be an informed user and keep learning
- Disclose and discuss usage
- What else?
- WisTech AI Webinar

Questions

Laura E. Plummer, MA, CRC, ATP
Laura.plummer1@dhs.Wisconsin.gov
608-514-2513

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