



What's Out There? Low-Tech AT Devices and Basic Functions

As a result of this presentation, learners will be able to:

1. Differentiate between high-tech and low-tech AT options
2. Give examples of low-tech devices
3. Select appropriate low-tech solutions when given a case
4. Describe the importance of person-centeredness in low-tech AT use with older adults

Differentiating Between Low-Tech and High-Tech

- Low-Technology: simple to use, easy to use, and relatively simple to obtain devices (1)
- High-Technology: devices that are more expensive, often complex, and relatively difficult to make and get ahold of (1)
- Choosing depends on:
 - The person
 - Their needs and desires
 - Device functions

Low-Tech AT for the Bedroom

- Bedrail
- Dressing stick
- Reacher
- Sock Aid
- Positioning wedges
- Night lights
- AFO assist
- Motion sensor lighting

Low-Tech AT for the Bathroom

- Toilet tongs
- Hand-held shower head
- Hairdryer holder
- Grab bars
- Shower chairs and bath benches
- Adaptive faucet
- Raised toilet
- Toilet frame/commode
- Bidet
- Walk-in tub/shower
- Waterproof emergency buttons

Low-Tech AT for the Kitchen

- Additional lighting
- Adaptive cups
- Adaptive utensils
- Adaptive plates/bowls
- Adaptive measuring utensils
- Pour aid
- Bottle, jar, and can openers
- Double spatula
- Kitchen timer
- Knife guard
- Adaptive cutting board

Low-Tech AT for the Living Room

- TV captioning
- Couch cane
- Lift chair
- Lamp touch adapter
- TV tone/volume amplifier

Mobility-Related Low-Tech AT

- Ramp
- Railings
- Mobility devices
 - FWW
 - 4WW
 - Manual W/C
 - Cane
- Threshold step/mini ramp
- Motorized stair lift
- Platform lift

Low-Tech AT for Outside the Home

- Car cane
- Seat belt grabber

Low-Tech AT for Low Vision

- Magnifiers
- Large print keyboard cover
- Targeted lighting
- Large print clocks
- Large print calendars
- Raised dots or color coding
- Large print labels
- Talking thermometer
- Talking pedometer
- Talking photo album
- Vibrating pager

Miscellaneous Low-Tech AT

- Adaptive writing devices
- Swivel disc
- Tablet stand
- PECS and related communication systems
- Timers/reminders
- Upeasy lift cushion
- Various seat cushions
- Universal cuff
- Noise canceling headphones or earbuds
- Sound amplification devices (e.g. Pocketalker)
- Strobe or vibration smoke detectors
- Weather and other alarms (can be strobe or vibration)

Martha's Case – Shared with Her Permission

Martha is an older adult who has chronic pain and rheumatoid arthritis. She began working with LLTS due to having repeated falls that occurred primarily at night. She was falling at least once per week and needed a lighting solution to help enhance her safety. Martha's home was already set up with an entry ramp and push button openers for her garage and home entry doors. Upon further evaluation, she was also having difficulty manipulating objects such as faucet handles.

- Review the low tech AT options gone over in this presentation and pick 3 things that could support Martha as she ages in place.
- Are there any other low tech AT devices that you know of that may be useful in this case?

Martha worked with an OT from LLTS who recommended a combination of low-tech and high-tech devices. Though motion activated lights would have been a good low-tech option, use of an Amazon Echo and smart bulbs was the best choice for Martha. To help with her fine motor limitations, she also got motion activated faucets for her kitchen and bathroom and switched to a smart thermostat. Martha went from weekly falls to having no falls at night. Her needs for a PCA also decreased from all day assistance to just needing help with AM and PM cares.

Key Takeaways

- Low-tech or high-tech AT should be chosen based on the person, their wants and needs, and device functions
- Many different types of low-tech AT exist for an assortment of functional concerns
- Selection of low-tech AT should be done in a person-centered manner, emphasizing autonomy

References

1. Cook, A. C. & Polgar, J. M. (2015). Assistive technologies: Principles & Practices. Mosby, an imprint of Elsevier Inc.