



Project | SEARCH

What do Wal-Mart Target, and Kmart have in common? AT

-Travis Rouse and Corinne Holtz, MS ATP

Assistive Technology Specialists

Nebraska Assistive Technology Partnership

-April Zornes, Nebraska Assistive Technology Partnership



- high cost



- Complicated



- difficult to use



Assistive technology myths



addressing AT in Project Search

- SETT framework (Zabala,1995)
Inclusive
- Universally designed
- Task oriented



SETT framework**

SETT

- **S**tudent
- **E**nvironment (see WATI obsv guide)
- **T**ask
- **T**ools

<http://www.joyzabala.com>

Student-Intern /Consumer

- What are the student intern's special needs?
- What are the student intern's current abilities?
- What do the student intern's need to do that they cannot do currently?



The Environment

- What are the student intern's daily environments?
- What materials and equipment are currently available in those environments?
- What are his /her peers using?
- Can those tools be adapted?
- What is the physical arrangement?
- there special concerns?
- What is the instructional arrangement?
- What supports are available to the student intern ?
- What resources are available to the people supporting the student intern ?

Environments

- are there instructional barriers?
- attitudinal barriers – ex: worksite, family, intern
- take notes of natural supports-***Key factor***

Internship examples from Nebraska PS sites



Environmental barriers addressed

- Bathroom Accessibility
- Office Accessibility
- Attitudes of other Employees
 - Barriers are not always related to physical barriers
 - When we are looking at devices or solutions for individuals, we do not want them to feel uncomfortable in their environment.

Where is our focus?

- Is it more important to modify the environment or teach the skills?



Examples of Environments



Nutrition Services



Linen Services

Examples of Environments

Admissions Services



Engineering Services

Task

- What steps make up the job?
- Task analysis break a large task into smaller sub tasks.
- Teach each sub task sequentially from start to end.
- In each task or step, sub task needs to be completed before moving onto next sub task.
can error correction be taught as separate sub task.

Task Analysis

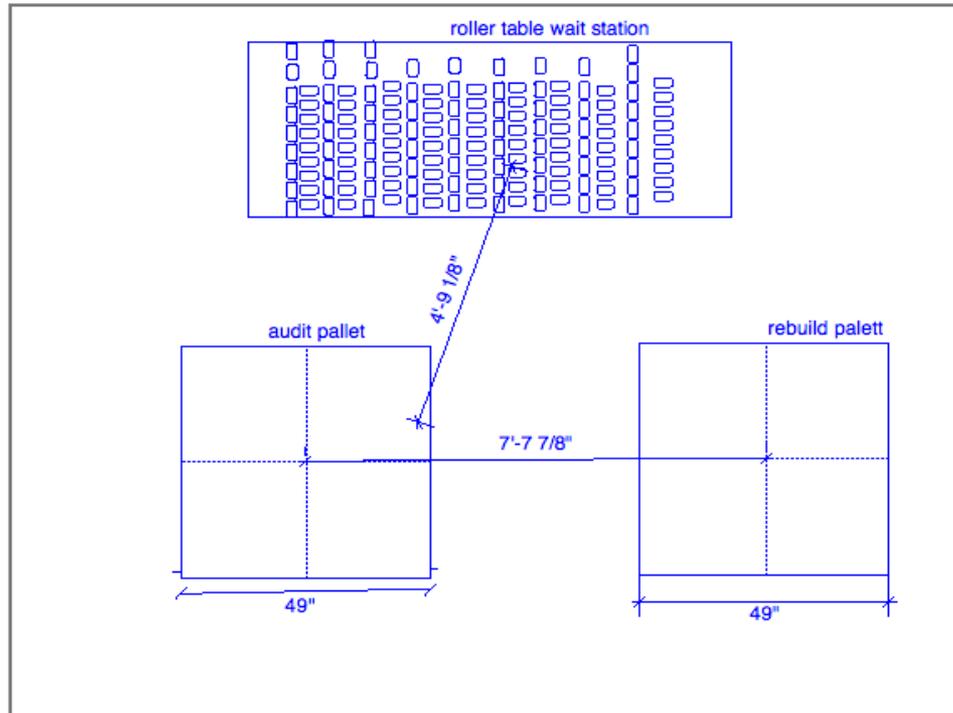
- Task analysis is used most often with those who have problems mastering complex behaviors.
 - Have you ever taught a son or daughter to tie their shoes?
 - You're already an expert.
 - Job site task analysis is NO different, the site is the only difference.

Task Analysis sections:

- Brief Job Statement: May be available from HR
- EQUIPMENT USED: Explore any options that are available to employees.
- Tasks: Break tasks out into smaller steps and taught one by one. (This will create small successes, which will build confidence)
- Environmental Conditions: Assess the environment in which the work will be performed. Certain individuals may affected by light, noise or temperature.
- Tactile/Sensory Abilities can be a factor when matching interns to jobs.
- Possible adaptations: Focus on tools last
- Diagrams of worksite for clarification, path of travel, supporting data

Task Analysis supporting data

# bottles in Box	Oz of liquid in bottle	Total ounces	Weight if water	Weight of laundry det
6	82oz	492 oz	32.06 lb water	33.7 lb
6	96 oz	576oz	37.53 lb water	37.8 lb
6	50oz	300oz	19.5 lb	20.5 lb
4	100oz	400 oz	26.1lb	27.5 lb



Naturally Occurring Tasks

- Do parts of these activities naturally occur in the environment without prompting?
- What are the critical elements of the activities?
- How might the student intern's activities be modified to accommodate the student intern's needs?
- How might technology support the student intern?

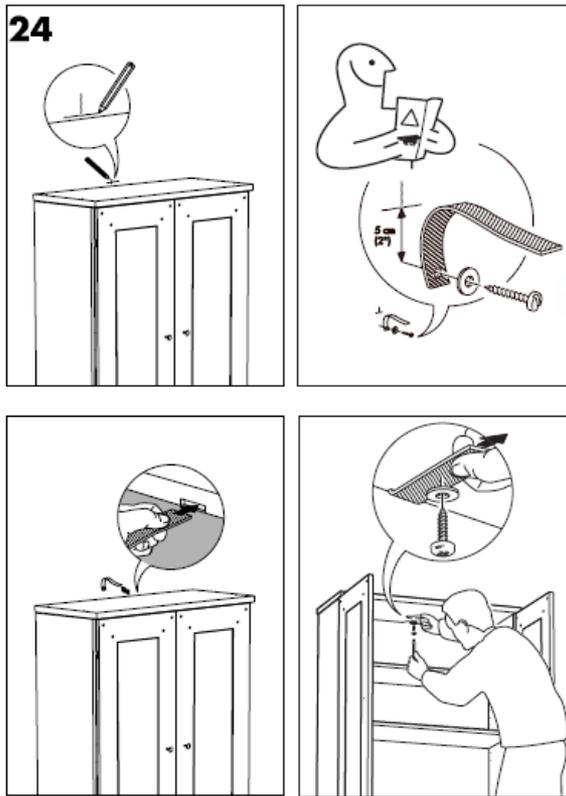
Why add symbols?

- 93% of communication is non-verbal
- 3M study found people process icons 60,000 times faster than text ²
- Makes for better universal design

²Traffic Sign Luminance Requirements of Drivers for Symbolic Signs - Thomas Schnell, Copyright 3M ©

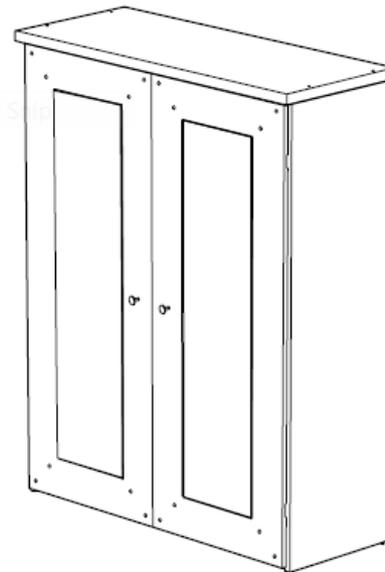
2009 *symbol Recognition and the Human Brain* Dartmouth

Symbol supports not just for non –readers

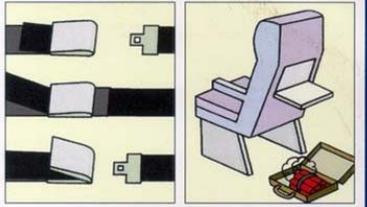
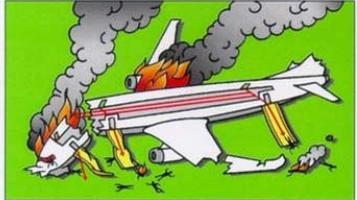


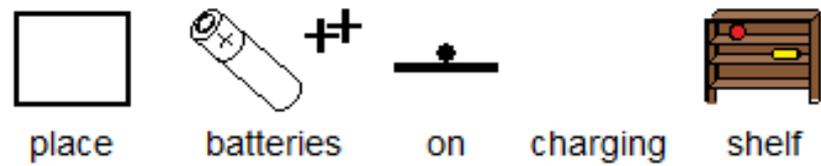
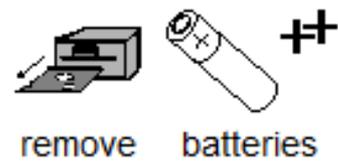
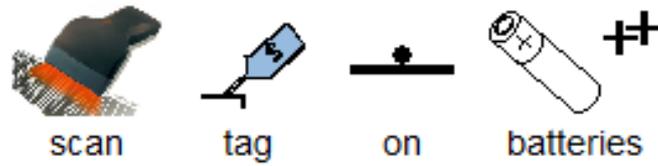
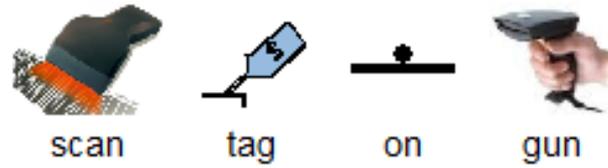
ALVE

Rectangular Strip



Picture supports

 <p>Take-off, Landing & During Movement</p> 	 <p>Water Evacuation</p> 	 <p>Oxygen Supply</p> 
 <p>Land & Water Evacuation Exits</p>  <p>EXIT OPERATION: ASSESS OUTSIDE CONDITIONS. IF OPENING EXIT INCREASES THE HAZARD TO PASSENGERS, DO NOT OPEN.</p> 	  	 <p>Bracing Positions</p>   <p>Slide Evacuation</p> 



The Tools

- Often focused upon too early
What no/low/high tech options should be considered when developing a system for a student with these needs and abilities doing these tasks in these environments?
- What strategies might be used to improve student performance?
- How will the team determine if an option is successful?

Time management modifications

- A student had difficulty realizing how long was long enough to do a task.
 - ex: stocked shelves too long then washed tables too quickly
 - may be able to use technology he already had



What is the problem?

- Can they tell time?
- Is there a clock they can read/see in the environment?
- Are they allowed to wear a watch or carry device that will allow them to set alarms?
- These are all barriers that can be frustrating and frightening to someone with a disability.

You May Already Have the Best AT

- They have already been using it and not knowing it.
- According to the American life project 85% of Americans own cell phones, and according to Pew Research Center, as of February 2012, 46% of American adults own smartphones. (Free Useful Apps)
- Training everywhere (Check community)
- Already in the public (A lot of technology is within reach)
- Better prices, easily replaced (Affordable to most)
- Socially acceptable (Everybody's using it)
- Dedicated devices “stand out”

Don't have one?

- AT&T Trade-In Program lets AT&T customers turn in old wireless phones for a Promotion Card.
 - Older models AT&T no longer services, i.e. analog phones may be available for free or very low cost <\$5
 - Clock /calendar functions do not need cellular service to function.
- Unfortunately In 2009, the EPA estimates that in the United States alone, 141 million cell phones were ready for some sort of end-of-life management. Only 8% of those phones were collected for recycling. 92% of them were just thrown out with the garbage or sitting in a drawer in peoples homes.

Phone as a Worksite Support

- Add pictures to contact list for supervisors, mentors etc.
 - Take pictures of task steps.
 - Record voice notes.
 - Use voice recordings as personal alarms.
-
- The capabilities of phones today are almost endless.
 - All you have to do is a Google Search for apps and there are countless apps for all sorts of disabilities.

Getting Started With Your Phone

- Check your cell phone:
 - Do you have a camera?
 - Can you record audio?
 - Does it have a calendar for appointments?
- Check the settings for your phone:
 - Make sure the volume is at a proper level for you.
 - Can you set alarms?
 - Is Voice Recognition on?

Time Management Example

- Project Search Individual needing assistance with keeping on task and also keeping track of time.
- Has the capabilities of work with apps and is not afraid of technology.
- First we tried to help this individual by using an iPod Touch that would allow him to set alarms for all of the tasks that he needed to complete.
- We were running to many issues with this, because he was constantly checking the iPod. He would check his device about every 5 minutes and this was very distracting for him.

Time Management Example Cont.

- One thing that I noticed is that this individual wore a watch every time I met with him. Maybe there would be a solution that we could use on a watch.
- After researching watches that were available I found a Cadex Alarm Watch that was very cost affective and we also had this device in out loan pool through AT4ALL.
- Tried the device for a couple of weeks and it was decided that this was going to work for him.

Orientation way-finding

- Student delivering supplies would become disoriented if the elevator stopped on a floor he did not want.
- Mounted a picture album with photographs of his elevator stops and office signs where he needed to stop . Flipped through each one by one.

Reading Writing Supports

- Text to speech programs can support student intern's needs while searching job listings and filing out on-line job applications. This can improve the quality of their application submissions.

Custodial Aide

- custodian - balance
fine motor limitations:
- design requirements:
 - hands-free
 - use upright
 - portable



Start Your Own Office Recycling Program

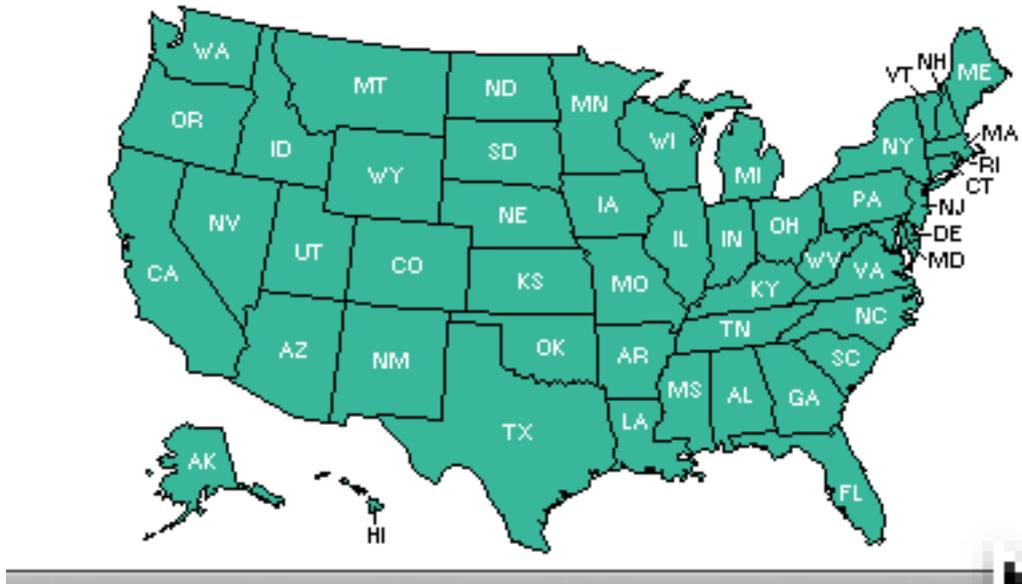
- According to a 2008 study by iSuppli, more than 85% of old cell phones are not at the end of their life cycle when consumers decide to get a replacement.
- Examples: Posters, flyers or QR codes.
QR codes are barcodes for websites and can be scanned by smartphones.

Recycle Reuse Programs

- Under the *AT Act*
- Rehabilitation Services Administration funds a statewide AT programs in each of the 50 states and six territories,
- All 50 participate in reuse activities
- Usually hosted by Tech Acts
- State-wide agency collaboration share information to improve their services.

How to find AT recycle centers?

■ www.passitoncenter.org



40% state leadership Activities

- Training and Technical Assistance
- Public Awareness
- Statewide Information and Referral
- Coordination / Collaboration for policy making state rehab councils
- Partners in policy making
- Parent advocacy trainings
- State buys for software

References

- <http://www.wati.org/>
- <http://www.joyzabala.com/>
- www.at4all.com
- www.atp.ne.gov
- www.passitoncenter.org
- www.att.com/gen/general?pid=20369

Thank you!!!

Travis rouse

travis.rouse@nebraska.gov
(402) 471-0733



Corinne Holtz

Corinne.holtz@nebraska.gov
308-865-5022





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